REPORT RESUMES

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A 1-YEAR PROGRAMED COURSE IN BEGINNING FRENCH TESTED THE FEASIBILITY OF PROGRAMED LEARNING AND ISOLATED THOSE PROBLEMS PECULIAR TO TEACHING ON THE COLLEGE AND ADULT LEVEL. "THE ALLP PROGRAMED BEGINNING FRENCH COURSE," WHICH SPECIFIED THE ORAL SKILLS ONLY, WAS THE MAIN PEDAGOGICAL DEVICE USED. THE RESULTS OF THE PILOT PROGRAM SUPPORTED THE BELIEF THAT PROGRAMED LEARNING IS FEASIBLE ON THE COLLEGE LEVEL. THE RESULTS OBTAINED, ESPECIALLY IN THE ACQUISITION OF SPEECH HABITS, SUGGEST THAT THE PROGRAM MIGHT BE APPLIED IN HIGH SCHOOL WITH THE SUPERVISION OF A KNOWLEDGEABLE FRENCH TEACHER. YET THE FIRST TRIAL USE POINTED OUT AREAS IN WHICH THE PROGRAM NEEDED IMPROVEMENTS, REVISIONS, AND ADDITIONS. RELATED INFORMATION MAY BE FOUND IN ED 010 488. (GD)

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Trial Use of the
ALLP French Program
at the
University of Akron
1963-64

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INTRODUCTION

This report is written with a view toward future users of the ALLP Program. It contains, therefore, many subjective observations about the students, their learning and the materials selected.

This report describes trial use of the program with 1. a college class, during the regular academic year (Sept.-June); 2. individual adults who undertook the program at various dates and worked through it or portions of it, according to different time schedules; 3. a group of college students during an accelerated summer session (eight weeks); 4. two seventh grade students during the summer (eight weeks).

This report does not intend to stress or compare the results between the experimental and the control sections. Not enough information is available as yet about the latter to make such a comparison significant. Furthermore, the administration of the program suffered from the project director's lack of experience primarily because he was a new staff member at the institution. On the other hand, the report stresses the various features of the program itself and its administration.

The first trial use did yield much information which will be valuable in revising the materials and improving the adminstration of such a program. This first trial use represents only the first faltering initial steps of a learning technique which may eventually improve the results in foreign language teaching and make more effective use of staff time.

I. The Problem

Programmed learning can be applied in many language learning situations, such as college and high school students in their regular curriculum, foreign language teachers who need to improve their pronunciation and control of structure, and adults who find it difficult to attend regularly scheduled classes.

The main features of programmed learning, i.e. learning by minimal steps, immediate reinforcement of each response, and progression at the learning rate of each individual student, promise more effective learning than studying at home and in the traditional classroom with its lockstep progression. More effective learning means better results, more specifically, near-native control of the pronunciation and intonation features, mastery of the grammatical structures at a level which the average ten year old acquires in his native tongue. It also means that less time is required to achieve similar results than in traditional learning. Programmed learning also promises an appreciable reduction in the rate of students dropping out of the first year course, because acceptable results can be achieved among all students regardless of their language aptitude.

Programmed learning is primarily self-instructional and assumes most "teaching" tasks. It is therefore hoped that a greater number of students can be "taught" by an individual staff member, thus increasing staff productivity.

Trial use of a one-year programmed course in beginning French was proposed to test the feasibility of programmed learning and to iron out the problems encountered on the college and adult level. It intended to investigate specifically the following questions:

1. Feasability of programmed learning with a college class, including investigation of problems and results:
    a. The complex problems of administering the program are presented, a learning condition from which the traditional classroom conditions are removed, such as the lockstep progression of the traditional class with its daily assignments, its regularly scheduled group meetings, its competition among students and periodic testing. An individual learning situation is substituted instead in which each student progresses at his own rate of learning with no home assignments.

    b. The results obtained after a two semester period are compared with those obtained in the other sections at the same institution. Particular attention is given to the results in the various skills since the program itself mentions only the oral skills as its stated objective. Achievement in reading and writing or (lack of it) is therefore of special interest, since these are major skills needed in a second year course.

2. Feasability of self-instruction on the adult level includes the results obtained, difficulties in learning and conditions under which student interest is maintained.

3. Questions related to the particular program used in the trial use include:
    a. The weaknesses of the program. The results obtained at

the conclusion of the program reveal the deficiencies of the materials: weaknesses in pronunciation, reading, and writing skills.

b. Discrimination training as done in the ALLP program, its role, limitations, and relation with the various aptitudes, provides useful information which might lead to a shorter program for the more gifted students.

c. The effects of withholding lexical meaning in the first part of the program both upon the acquisition of new speech habits and upon student motivation.

4. Questions related to learning process include:
   a. equipment best suited for learning in the language laboratory and at home;

   b. relation of student aptitude, needed time, and the results;

   c. influence of motivation and attitude;

   d. learning conditions;

   e. most economical time schedule;

   f. effects of previous training in a foreign language particularly in high school;

   g. effects upon speech when the reading skill is introduced;

   h. role of the instructor and laboratory assistant, or native informant;

   i. attention span of the learner who must spend anywhere from one to eight hours per day in the laboratory.

II. The Materials

The trial use at The University of Akron used the ALLP Programmed Beginning French Course prepared under contract with the U. S. Office of Education, (contract number OE 3-14012) and The University of Michigan under the directorship of Professor F. Rand Morton.

The objectives of the ALLP French Program, the so-called terminal behavior, specify the oral skills of the language only. It aims at imparting to the student near-native pronunciation and intonation habits and the basic structures used in speech as listed in Gouggenheim's Le Français Fondamental (1^{er} Degrée), with a minimal vocabulary of about 800 items. It intends to train the student "to generate the French sounds and intonations to a degree of correctness which approaches the speech of a native and with which the student will be accepted by the native as a welcome outsider". The ALLP French Program does not teach reading or writing. The orthographic script is not introduced.

The ALLP French program consists of four parts:

1. Part I: Phonology

Part I consists of 500 frames, totalling 30 hours of recorded materials, and subdivided into 25 problems. Each problem centering around a sound or a group of sounds is subdivided into discrimination frames, vocalization frames, phonemic symbol frames and syntax frames. In the discrimination portion the student learns to differentiate automatically betwen the French phonetic features and those of the English counterpart. This ability to discriminate is taught in individual syllables and in sequences of up to five syllables. The student is taught the discrimination skill to enable him to monitor his own speech for purposes of self-correction.

The vocalization frames intend to train the vocal apparatus to generate correct French sounds and sequences of sounds. The pitch and stress system, the so-called supra-segmental phonemes, is taught on a syllabic basis, while the overall intonation patterns of the various sentence types are taught to the extent that the student recognizes and imitates rising and falling patterns of individual word groups.

The phonemic symbol frames introduce the student to a phonemic transcription system, used later to demonstrate the structural changes occurring in the various patterns.

The syntax frames do not teach systematically the structure of the language. They are intended to make the student aware that the grammatical structure of the language consists in sound shifts, that sounds are used as syntactical signifiers or accoustic morphemes and have meaning in specified environment.

During the entire Part I lexical meaning is withheld from the student. The student learns to discriminate and to mimic without knowing the meaning of what he is saying. In the syntax frames only is he taught the meaning of the grammatical structures but not the lexical meaning.

Part II: Basic Vocabulary

Part II consists of about 200 frames, totalling seven and a half hours of recorded materials. The student is introduced to a minimal vocabulary on which subsequent exercises are based.

Part III: The Syntactic Structures

Part III consists of 662 frames totalling thirty-six hours of recorded materials. These intend to train the student to make the syntactically appropriate reply to a given stimulus. The student learns to manipulate syntactical units systematically and automatically. He is led to master the code of the language as a mould into which the content words are placed as the vocabulary increases. Part III also includes 48 dialogues based on everyday situations in France. They are intended to increase the student's vocabulary and relieve the tediousness of learning syntax.

Part IV: Conversations

Part IV consists of 22 conversations totalling five hours of recorded materials. They are intended to further expand the student's vocabulary through a variety of vicarious experiences common to a French native.

A Reading Program was prepared as a supplement to the ALLP French Program. Reading is its sole objective, even though there are a few frames entitled "writing". The term reading in this context means the association of sounds with their orthographic symbols. The original reading program consisting of 38 frames was tested with five students after they had reached frame 1000 of the Program. A number of deficiencies became evident, i.e. the same errors were made repeatedly. The program was then revised, enlarged to its present 53 frames and re-recorded, using the principle of contrast to overcome the difficulties. The revised reading program was tested with another six students who had reached about the same point in the program. None of the previous difficulties recurred except random slips which are to be expected and considered normal.

Both the ALLP and the Reading Programs were accompanied by the necessary student booklets corresponding to each part. They gave instructions for each frame, examples and brief grammatical explanations. The explanations themselves were programmed and modeled after the Holland-Skinner program in psychology. The student was led to discover the sound changes that occur in a given structure.

During summer session a Supplement for the First Semester and a Supplement for the Second Semester were printed and made available for the students. They contained the vocabulary, about forty per cent of the exercises in Part II and Part III, and the entire script of Part IV. The exercises chosen for the Supplements were the more difficult ones, i.e. the ones with long sentences, or the exercises in which two speakers gave each a stimulus to be incorporated in the student's response. Half of these exercises presented the responses in writing, thus allowing the student to check his own written responses with the model.

III. Student Population

1. Buchtel College of Arts and Sciences:

In the Fall of 1963, four day-sections and one night-section were offered by the Department of Modern Languages in Beginning French. Each student who had any high school French was given the Co-operative French Test (G. Spaulding, P. Vaillant, Educational Testing Service 1960) for placement purposes. Anyone who scored above 125 was placed in Second Year French, below that score, in Beginning French. Students were assigned to the various sections according to whatever time best fitted their schedule. Sections two and four, totalling 33 students, were set up as experimental classes. In addition, one student, (a girl) registered for the course through the Division of Special Programs and took the entire program during the Spring Semester. She will be considered a member of this group for purposes of evaluation, particularly since she is a student of the College of Arts and Sciences, thus bringing the total of the original registration to 34 students.

Out of these 34 students, ten students had from one to three years of French in high school. For most of them, from one to fifteen years had elapsed between their last French class in high school and the beginning of this course.

Their aptitude measured on the Carroll-Sapon Modern Language Aptitude Test (MLAT) ranged from the 99th percentile down to the 5th percentile, with eight students ranging from 99th percentile to 75th percentile, eleven students from 70th to 50th percentile, six students ranging from 45th to 25th percentile, and five students ranging from 20th to 5th percentile. Four students did not take the aptitude test.

2. Division of Special Programs:

Beginning French was offered as a non-credit home study course to adults in the community through the Department of Special Programs. The course was advertised in the Akron Beacon Journal, through a flyer distributed among industries in the area, and through a special brochure sent to industry and to the area schools. The newspaper also carried a short article at the time the evening courses for the second semester were offered. Of the twenty-one people interviewed and expressing an interest, fourteen students registered for the course. They ranged in age from 20 - 60. They came from industry or public schools; a number of them were housewives interested in learning French. Of these, four had French in high school, five had one or two years of college French, and six no previous experience with French. For most, ten to thirty years had elapsed since their last contact with French. Most of these students began the course the first of February, and continued until July 31. One student registered June 22.

The MLAT was not given to these students since they came for interviews one at a time and never met once as a class.

3. Eight Week Summer Session:

The Programmed Beginning French Course with some major changes was offered as an intensive course during the eight week summer session from June 8 through July 31. Seventeen students enrolled in the course. Of these 5 had French in college, but failed the course, 6 had French in high school and were placed in the beginning French course since their score on the Co-op test was below the 126 required for second year, 6 had no French. No other course in Beginning French was offered during the summer session.

Their aptitude measured by the MLAT ranged from the 95th to the 10th percentile with two students in the upper quarter, three students ranging from 60th to 50th percentile, nine students ranging from 45th to 25th percentile, and four students ranging from the 20th to the 10th percentile. The aptitude of these students was much lower -- 29 percent in the upper half and 70 percent in the lower fifty percentile rank -- than the aptitude of the students during the academic year - 63 percent in the upper half and only 36 percent in the lower fifty percentile.

IV. Facilities

The language laboratory at The University of Akron was made available to all students. During the academic year, ten positions were permanently reserved for the French Program. Each of the ten positions was an audio-active and record position containing a half-track stereo tape recorder, a transistorized amplifier, a microphone and high fidelity dynamic headphones. The equipment was so arranged that the upper track played back the stimulus, while the student's response was recorded on the lower track. By means of switching, both the upper and the lower track were played back providing the student with the model and his own response for comparison purposes.

Each tape recorder was equipped with a revolution counter, permitting accurate location of each frame when the counter was set at zero at the beginning of each tape and then the student noted in his booklet the number indicated by the counter at the beginning of each frame. Each tape recorder was also equipped with a pause button permitting the student to increase the pause provided for responses whenever he encountered any difficulty.

In order to be able to accommodate the expected enrollment in the summer session The University of Akron purchased and installed the same audio-active equipment described above in ten positions, bringing the total to twenty fully equipped booths.

The Programmed Beginning French Course was presented on seven inch reels containing each 1800 feet of tape, recorded at 3 and 3/4 ips. Twenty copies of each tape for Part I, and ten copies of each tape for Parts II--IV, were available, thus assuring an ample supply of tapes so that nobody had to wait for another student to finish his work before being able to continue on his own.

The home study group used whatever tape recorder was available to them.

V. Procedures

1. Students in the Buchtel College of Arts and Sciences:

a. First Semester

The students met for the first time on Monday, September 16, at which time they were informed of the experimental nature of the course, the procedures and what would be expected of them:

1. They would meet once a week to receive the assignments and be given the necessary explanations;
2. They would spend an additional eleven hours a week in the laboratory with the understanding that they were free at any time to rearrange their laboratory schedule according to their convenience, and could work less hours if less time was required to complete the weekly assignments. On the other hand, they were told that if anyone wanted to finish the program sooner, they would receive the eight credits as soon as the work was completed and would have the opportunity to earn additional credits in second year work.
3. The grading system was explained: A for those who acquire native-like pronunciation, B for those who maintain an American accent; Incomplete for those who cannot finish the assigned portion of the program by the end of each semester.
4. Before proceeding to the next problem, their pronunciation would have to be checked either by their instructor or the laboratory attendant.

During the first week, much time went into explaining what they were to do, how they were to work, why they were experiencing difficulties with discrimination of sounds. Every effort was made to make them feel comfortable and keep them fully informed about the procedures. The Carroll-Sapon Modern Language Aptitude Test and the Pensacola Z Scale test testing "personal autonomy" were administered to the students.

Each student turned in a time schedule of all his classes from which attendance schedule was worked out for each individual, providing twelve hours in the laboratory and including a weekly class-meeting. In the beginning this schedule was faithfully observed; later the student was able to rearrange his schedule if other hours were more convenient to him. It was attempted to keep an attendance record by asking the student to sign in for every hour spent in the laboratory.

During the first semester a weekly meeting of about 30 minutes was held during which a weekly assignment was given and explained. It attempted to preserve the class atmosphere and gave the students an opportunity to ask questions and express their opinions. It was designed to establish a close rapport between instructor and students. The weekly assignment became necessary when lax attendance became evident. It was an attempt to insist on better study habits. The student was asked also to report every week on how much work he had covered. This was designed to make some students conscious of how far behind the class they were.

The explanations of the assignment consisted in the description of sound formation during Part I with particular emphasis on the contrast between the American and the French speech habits. When the structures were drilled, the explanations attempted to point out the points of contrast between English and French structures in order to make the student conscious of possible errors. The grammatical explanations were only of an accoustical nature using the phonemic transcription system for illustration purposes. No reference to spelling was made.

A weekly display session was established during the last quarter of the Fall semester. The instructor met with small groups (one to four students) who had reached about the same point in the program. They were not grouped according to linguistic ability but rather according to the amount of the program completed. Various techniques were used during those meetings to establish interpersonal conversation. The participants were urged to ask questions among themselves, a technique not always successful, or else were asked to answer questions presented by the instructor. The questions centered around the dialogues learned previously, repeating many of the questions drilled in a given dialogue and asking others referring to the student personally.

The principal objectives of the display session are threefold:

1. practice in interpersonal conversation which is quite different from answering questions presented by a machine.

2. demonstration to the student that he did learn to understand and to speak. The student needs reassurance that learning is possible in this unconventional set-up.

3. notation of the weaknesses apparent in the student's speech. The instructor needs to know the weak points for further drill and advice.

Further attempts were made to stimulate conversation. The instructor or the attendant would address a simple question to a student when entering or leaving the laboratory. Whenever a student wanted to ask a question, he was encouraged to formulate it in French.

During the first three weeks the pace was extremely slow. Only 78 frames were completed. The assignments were gradually increased to about 75 frames a week during Part I. By the end of the 8th week, frame 450 was to have been completed in order to receive a midsemester grade. An "incomplete" was given if the student had not yet reached this point. During the second half of the first semester, Part II (vocabulary) and the beginning of Part III (structures) up to frame 903 were to be completed in order to receive a semester grade. An "Incomplete" was given if the student had not reached this point. According to The University of Akron regulations, a student has half of the next semester to complete his work. After that time the Inc. becomes an F.

A formal test was administered at midsemester and also at the end of the semester. All students who had reached frame 450 at midsemester and frame 903 at the end of the semester took the test, the others whenever they reached these landmarks.

For the midsemester test, a syntax frame was chosen and recorded. Pronunciation was the only criterion for purposes of grading. At the conclusion of the Fall semester, a final examination was administered and served as the basis for the final grade. It consisted of three parts, each presented orally from tape:

1. pronunciation: repetition of a number of utterances, each testing a specific sound.

2. mastery of the structure: a number of utterances had to be transformed into another structure to demonstrate the student's mastery of the present tense and the infinitive.

3. conversation: the student answered a number of questions taken from the dialogues.

At the end of the Fall semester the students were interviewed by the Head of the Department, Dr. Arno Lepke, to determine their reactions to the course. During this interview, all students remained annonymous in order to elicit frank comments.

These students mentioned the good points of the program and also expressed a number of criticisms, both being summarized here:

> They liked the course for utilitarian reasons as a good preparation for government service and travel, for the results achieved in learning to speak; they mentioned acquiring conversational facility, considered by some as an incentive, or just simply learning "more" than in their previous high school experience; they commented favorably

about the approach used in programming, permitting them to advance at their own rate of speed and the availability of the assistant or instructor whenever needed. Those who liked the course emphasized that learning French was not boring, but rather exciting. Most criticisms of the course, however, centered around the following topics:

1. The time element: Twelve hours a week is considered a considerable amount of time. Some complain that it takes the best hours of the day. They would prefer to do their homestudy in the evening.
2. Length of Part I: Learning the pronunciation without knowledge of what is being said was considered to be too long.
3. Explanations and formal grammar presentation: Some students would like to have more formal explanations of the phonetic features as well as of the grammatical structures, more of what they have been used to in previous language courses. They request a grammar book which would permit them to study rules and review past grammatical features.
4. Meaning: The introduction of lexical meaning at a much earlier point, preferably in Part I is requested by some. The lack of meaning contributes to boredom. In the pattern drills of Part III, the student is often not conscious of the exact English meaning of the sentences he practices. This perplexes some students who want to translate every utterance, and gives them a feeling of insecurity.
5. Oral presentation: The complete oral presentation of the program is unsettling for some. They would prefer to see everything in writing. Some students feel that the speakers on tape talk too fast. It may be that some utterances are pronounced less distinctly, particularly those spoken by the female voice. Others meant simply that the pause provided for the student response is not long enough.
6. Class procedure: Some dislike the isolation in booths. They would prefer more contact with the other students, and more class sessions where they can compete with their classmates. The course does not "challenge" them, which might be interpreted as a lack of competition with classmates. More quizzes are requested by a number of students. For many students, the results obtained in regularly scheduled examinations are the evidence of their progress in the course. Tests serve as subgoals and bring a familiar reward, the grade.

b. Second Semester

The second semester differed from the first in a number of procedural details. No time schedule was requested from the students - which was a mistake. The student, however, continued to indicate his attendance in the laboratory and his weekly progress. The weekly class meetings were discontinued. Most explanations given in those sessions had to be repeated as the student faced the problem. Attendance in these class meetings had dwindled steadily. The weekly assignment, however, was continued.

The display sessions were continued and given greater emphasis than in the first semester. Later in the term, students met individually with the instructor for about ten minutes each, since it was almost impossible to find several students at the same point of the program meeting at the same schedule. The procedure during these conferences was similar to those in the first semester. Questions were asked about a particular dialogue recently studied, followed by questions concerning matters of interest to the student, his family, his activities and plans. In the latter half of the semester, the student was asked to give a summary of a dialogue he had studied, or to present it from memory if preferred. After the completion of the Reading Program, he was asked to read a dialogue at sight in order to demonstrate his ability to read and to comprehend unfamiliar materials. A few questions were then asked about the content.

Conversation in French among students was also encouraged. It was practiced primarily among the best students able to speak with some fluency.

At the beginning of the Second Semester each student received an evaluation of his performance on the final examination. He was told what sections in Part III he needed to review before continuing with the work of the second semester. He was reexamined after he had finished this reviewing.

During the second semester, Part III (structures) and Part IV (conversations) of the ALLP French Program were completed. The work was interrupted at about frame 1000 for the French Reading Program. The French Reading Program established the transition from phonemic script to normal spelling. To maintain the reading skill and to improve reading speed and fluency, the student was requested to read the dialogues of Part III and the conversations of Part IV in the normal French spelling. He was instructed to read them after he had learned to pronounce them correctly. Reading in this context means reading aloud.

Special attention was given to pronunciation to see whether any deterioration would occur when the student would read from an orthographic script. Except for a few cognates which had already been noticed in their oral work, those students who never had French before did not show any deterioration in their pronunciation. The Reading Program was used only with students without previous French in high school. Those who had studied the language in high school were asked to read the conversations for the sake of practice.

Once the student has acquired the necessary fluency in this type of reading - association of sound and symbol - he also needs to learn to read in the extended sense of the word, i.e. reading for comprehension. After the completion of the ALLP French Program, the student was requested to read Le Petit Prince by Saint Exupery of which a professional recording, prepared in Paris under the auspices of Wayne State University (1955) was used. Even the best students needed to be given clear and definite instructions on how to proceed. They wanted to read the text without listening to the tape, to translate it into English or at least look up every word unknown to them. They were therefore given the following instructions:

1. Read the text together with the tape. The intonation of the speaker will help in understanding.

2. Do not turn to the lexicon for the first two or three readings. Guess the meaning of the unknown word or leave blank. No translation is permitted. Read the text for the general ideas at this point. As long as the story makes sense or seems reasonable, it can be assumed that it is being understood.

3. Now read the story for the details. Make use of the lexicon sparingly. Look up the verbs rather than nouns or adjectives. Many of the nouns and adjectives will become clear through the context. It is furthermore not necessary to know the exact English equivalent for every noun or adjective. The general meaning can most often be inferred from the context.

This type of reading, also called extensive reading, develops a passive knowledge of vocabulary. The student was not expected to actively recall the new words. This fact was born in mind by the instructor when he asked questions about what had been read.

Not all students had completed the reading assignment of Le Petit Prince before taking the series of final examinations. In fact, one-third read it after the examination.

Writing is one of the objectives of every first year course. In this connection, it means the ability to transcribe in correct spelling the sentences learned orally. The ALLP French Program makes no provision for the teaching of this skill. To remedy this deficiency each student was requested to write out twenty of the dialogues or conversations of Parts III and IV. He could write them from memory or as a dictation from tape. Afterwards he checked his work comparing it with the transcription and making all necessary corrections before handing it in.

This writing assignment was an inadequate device to teach spelling. It was merely a stopgap measure until the materials to teach spelling systematically could be provided in a revised version of the Program. In the future, special attention will be given to writing when these students take the second year course.

Examinations were given beginning with frame 900 at about 50 frame intervals for a total of 13 quizzes. Each consisted of exerpts taken from the various frames taught in that section and questions about the dialogues, about 30 items in all. The stimulus or question was presented in writing, in phonemic transcription at first, and then in normal orthography once students had learned to read. After frame 1200, the student responded orally while the instructor or lab attendant listened and noted the errors. The student had a chance to study the test before taking it. Although it was suggested that they should not keep it longer than five minutes, many kept it much longer. No attempt was made to police it either. They were not prevented from getting help from their book, or from another student. Each test was graded A or B or was rejected and had to be taken over if more than four errors were made.

The MLA - Cooperative Foreign Language Test Co. 1963, Educational Testing Service, Cooperative Test Division, Princeton, New Jersey was given as the final examination. In addition the Cooperative Listening Test (1956) was administered. These tests were given to all sections of Beginning French for purposes of comparison.

Professor Frederick Eddy of Georgetown University was invited as an outside evaluator to form an opinion of the results. He saw each student for a twelve minute interview during which he asked a number of questions of them. He graded the student in five categories: Pronunciation, fluency, control of grammar, control of vocabulary and comprehension of questions and remarks.

Reading aloud was also evaluated by Professor Eddy. A page of reading material had been sent prior to his coming to Akron. Each student read it aloud and recorded his reading on tape after having had an opportunity to prepare it.

Each interview was concluded with a short conversation in English about the student's estimate and reaction to the French Program.

Eight students, - one third of the class - did not finish the work by the end of the second semester and received an Incomplete. The reasons are varied, such as serious injury in a car accident, or slow learning habits. Special arrangements were made for these students to continue their work on an accelerated basis immediately after their final examinations and during the month of June, 1964. They were asked to complete the assignment in the shortest time possible.

Native informants were used to staff the language laboratory during the academic year: Mr. Jacques Millet from Paris and Miss Arlette Elefant, native from French speaking Belgium. They substituted for the instructor whenever he was absent, administered many of the tests, provided explanations whenever needed, and at times took over the display sessions.

The instructor spent between fifteen and twenty hours in the language laboratory with the students performing essentially all the duties mentioned above. His presence and continued interest is one of the major motivating forces for the students.

2. Students in the Division of Special Programs.

Establishing the non-credit course for adults was extremely slow. The difficulty resulted from the fact that the instructor had just arrived as a new staff member to The University of Akron and was unknown, and because advertising could not be sent out before the start of the Fall semester, a time when most people had already selected the courses they wished to take. For all practical purposes the course started by the beginning of February and continued to the end of July.

Each participant was interviewed individually by the instructor. The aims of the course and the procedures were carefully explained. He was urged to begin the first hour's work under the supervision of the instructor so as to be able to receive whatever explanations seemed necessary. He was urged to come to the laboratory at least once a week and to make use of the facilities of The University. He was told to call the instructor in the evening at his home whenever he encountered a difficulty in his work. The instructor was available for personal meetings whenever requested.

The course was essentially a self-instructional home study course. The student received on loan from one to five tapes whenever he came to the laboratory. For those who did not have a tape recorder the laboratory of The University was at their disposal if they could find the time to come down regularly.

A reduction of Part I was the essential change from the original ALLP French Program. The students were advised to eliminate 94 frames, primarily from the syntax frames. They were also told to reduce their work in the discrimination frames by eliminating the second half of these frames whenever they made less than three mistakes in the first half.

No tests or display sessions were required of them, but made available if they wished to make use of them. Those who finished and could be reached were asked to take the final examninations given the day students.

3. Students in the eight week summer session.

The University of Akron offers in its regular summer session an eight-week course carrying eight semester credits and meeting for three and a half hours daily, Monday through Friday. The course is the equivalent of the regular course during the academic year and requires as much preparation as the usual academic year course. The student is not allowed to take any additional courses if he elects this language course.

During the summer of 1964, the French Program was substituted for the traditional course. The students were given two options:

1. to follow the program and do all the work in the language laboratory which would require from 30 to 40 hours a week.

2. to follow the program in the language laboratory for four and a half hours every day and supplement this work with homework estimated to take three hours every day. This second option was made available for those students who could not spend most of the day in the language laboratory.

All students elected the first option. They often took a tape home when they wanted to leave before completion of the assignment.

Some major changes in the original French Program were made for the summer session:

a. Part I (Pronunciation) was reduced by half by eliminating many discrimination frames, some vocalization frames, the introduction to the phonemic symbols, and half of the syntax frames.
b. The sequence of the parts was changed. The French Reading Program was introduced immediately after Part I and before Part II.
c. The Supplement to the student booklet made possible a small amount of homework, such as review and writing.
d. The Structure of French by Mueller and Mayer was sold to the student as their grammar.
e. Writing was introduced at the conclusion of each structural problem in Part III. The student was required to write out a number of drills to learn the spelling of the grammatical features. He also wrote out a number of tests.
f. Additional cursive reading was introduced during the second half of the summer session. Students read a short adaptation of Tartarin de Tarascon, and the booklets Lafayette and Lafitte edited by Keating-Moreau and published by the American Book Company.

Each student received the schedule for the entire session, providing one week for Part I, two days for the Reading Program, three days for Part II, four weeks for Part III, one week for Part IV, and the remainder for reading Le Petit Prince and taking the final examination.

Examinations were administered as follows:

> A pronunciation test was given at the conclusion of Part I, another test was administered after Part II, testing reading and mastery of vocabulary; a test was given every fifty frames in Part III, two tests in Part IV and one after reading Le Petit Prince. The final examination consisted of the MLA Classroom Test, and the Co-op Listening Test, the same tests which were administered to the students during the regular academic year.
>
> The first day of classes, the participants were given the Carroll-Sapon Modern Language Aptitude Test.

Two twelve year old girls who had just completed seventh grade undertook the program during the summer session. They spent four hours a day from 8 am till noon with a fifteen minute break, five days a week in the language laboratory. They studied the revised Part I (pronunciation) of the program, then they memorized the first three dialogues from Part III, followed by Part II (vocabulary). They were then given a selection of frames from Part III (syntax) bearing on the present tense and the infinitive, the adjectives and the determiners. More stress was placed on the dialogues than in the current program.

Part I and Part II each took forty hours or two weeks of work. They worked together after having completed Part I (Pron.). They recited the dialogues to each other, made changes as might fit their particular case as actors of the dialogue, and other substitutions from the vobabulary they had learned.

Administering the program during the summer session was very similar to the procedures of the academic year. The students were monitored and tested by the instructor, who spent about six hours in the laboratory every day. The display sessions were maintained. Conferences with individual students, however, were replaced by by small group meetings and later by meetings with the entire class for thirty to forty minutes every day. The questioning was done by the instructor and centered around a given grammatical topic. One of the better students responded as a model. The same question was then asked by each student who addressed his neighbor and was answered in like manner. In this way, each student was constantly either asking a question or answering one, following a model and under the supervision of the instructor who could listen in on all the groups and insure correct replies. This technique was preferred by far, since it maintained the atmosphere of the classroom most faithfully and since the students felt to be under less strain.

Memorizing the dialogues was also stressed more than during the academic year.

VI. Observations Relating To The Trial Use Of The Program.

A number of observations can be made, based on the actual trial use rather than on the results achieved.

1. Feasability of programmed learning in a college class.

The advantages of programmed learning on any level including the college level are obvious and need merely be mentioned. Progression at the learning rate of each individual eliminates the difficulties the student encounters through missing class, as well as those encountered by the slow learner in a class which proceeds at a pace too fast for him. It can insure moderate success for the student with minimal language ability, provided that he persists in his efforts and that his progression be carefully controlled. On the other hand the good student who knows how to study can proceed much faster and undertake advanced work much sooner.

Progressing at the learning rate of each individual student also causes a number of problems. Missing is the familiar classroom atmosphere which in the traditional system provides much of the learning impetus. There are no daily recitations in which the student can compare his performance with that of his classmates; no daily assignments either since in practice the long range semestergoal becomes a reality only two weeks before the final examinations. Progressing at the student's rate of learning presupposes that he need not have completed the Program at the end of the time allowed for it, such as the two semesters, or three quarters of an academic year, or the summer session. Since the student goes only as fast as he can learn, provisions must be made which will allow him to continue with the Program beyond the time assigned for the course. This creates an administrative problem. Indeed, measures can be taken to insure a minimum number of hours of work. Yet a sizable segment of each class, as will be shown in the correlation between aptitude and results, is unable to proceed fast enough to complete the present program. Some of these slow students are able to achieve excellent results, if given the time they need. They either need to extend their study of French several weeks beyond the end of the course, if they carry a normal credit load, or they will have to curtail the number of credits they are taking in other subjects to allow enough supplementary hours for French during each week.

If on the other hand, the program can be reduced in size through future revisions, so that the slow student can complete the assignment in the normal period of time provided, then provisions must be made so that the average and particularly the fast learner can undertake the work on the intermediate level. Permitting students who finished the program much earlier to discontinue their contact with French while waiting for the intermediate course would be unwise. Many of the habits acquired in the program would have been forgotten by the beginning of the next course.

Regular and faithful attendance, week after week, and day after day, is one of the problems. The student was told that his work in the language laboratory was to be at his convenience. Those who had a tape recorder were given permission to work at home. One preferred to work in the library. Everything, however, tended to interfere with their study schedule. During the early part of the semester in particular it was difficult to maintain the proper discipline and work attitudes. Attendance became irregular. For some a convenient time to study meant a time when they had nothing else to do. Every test in other courses became more important than their work in French. Two weeks before the grading period these same students would apply the cramming techniques so common in their other courses. They would hasten through the exercises at a very fast pace without paying attention to the accuracy of their responses, thus often thwarting the basic features of the Program.

Strict learning conditions must be established if the Program is to be given a chance to succeed. It is unwise to allow studying at home or at the library. Not one of the day students who worked at home remained on schedule or devoted the necessary number of hours to the program. The rule must be established that a specified number of hours, according to a definite schedule drawn up for each student, must be devoted to the Program and that every hour missed must be made up. These rules must be accompanied by the necessary disciplinary measures, such as dismissal from the course after a specified number of unexcused absences. The experience with the present trial use indicates that the majority of college students are not mature enough to follow a self-instructional program without rigorous checks on them. Students will withdraw as soon as they become aware that they are behind schedule and would have to work many hours to remedy their delay. Too kind an attitude on part of the instructor merely encourages them in their delays and will result in a large number of drop-outs. Maybe half of the withdrawals in the present trial use might have been prevented through an uncompromising attitude about their attendance.

Giving a weekly assignment is another device by which the student can be induced to work regularly. The assignment should be determined for the entire semester at a pace well suited to the average student. The very slow student will have to devote addtional hours to attain the weekly goals. It is then the responsibility of the instructor to see to it that these goals are reached regularly.

Testing is another safeguard. It seems essential to administer some examination at the conclusion of each segment of materials. Each test must clearly show whether the student has mastered the pattern under study. If the results are not satisfactory the test must be rejected and the student must go through the same material over again. Once the routine and standards have been established the student works with much more concentration and is more readily willing to attain the goals set for him.

Tests are also a psychological necessity. They seem to convince the student that he is learning by this unorthodox method. Furthermore the grade given at the completion of each test is a familiar landmark pointing in the direction of success for the course. The student resented the initial statement that he would get an A or B upon completion of the program. He wanted to earn his grade. Therefore when the program was used during the summer session the student was told of the prevalence of good grades, but it was explained to him that he had to earn his grade. The program was merely a method by which he was forced to master each portion of the course.

Giving tests after every fifty frames in Part III is not enough, and also too time consuming, since the test will be relatively long. A short test should be given at the end of each problem. It should be limited in time, and demonstrate convincingly to the student whether or not he has mastered the essential features of each problem. It should contain an indication of what is to be reviewed for every item missed. A test given at the end of every fifty frames and graded by the instructor will then serve as a review.

An almost continuous check on daily performance is necessary with college students. Some are eager to learn and do their work faithfully. Others are not interested in the language and lack motivation; they are interested in the credit and the grade. They tend to do the weekly assignment as quickly as possible with little regard to the correctness of their responses. Accurate pronunciation is the least of their concern. The assignment tends to become the completion of a given number of frames rather than the acquisition of the skill being drilled therein. Still others, more eager to learn French, need supervision because they tend to relax, neglect good pronunciation habits, and above all, are not very self critical. They excuse their mistakes as slips due to lack of attention, and remain convinced that they have mastered the pattern. Only few students consider it essential to be able to respond within the short time limit provided for that purpose. Such a lenient attitude is much less pronounced with more mature students who have more precise goals.

The display sessions also present some problems. In the beginning they cause the student much anxiety. He is afraid not to be able to perform orally as he is naturally reticent to talk in the language. Some students also feel selfconscious in the presence of other classmates. For these reasons a number of students avoided these sessions whenever they could. With tact and firmness, the instructor must insist that presence in these sessions is required, that the student has the responsibility to meet with the instructor regularly and that each absence must be made up. A grade given for each such recitation will help insure faithful attendance.

The presence of native informants in the language laboratory is a valuable asset. They can create a small French island within the walls of the laboratory.

They could be used in a much more active role than had been attempted during the first trial use. They could monitor the student's daily work, correct mistakes that persist, show a personal interest in their progress and praise and compliment every little achievement. These duties will require the monitor's constant attendance and if done conscientiously leave little or no time for other activities.

The instructor spends much time in checking the daily performance, in listening to the students in display sessions and in giving oral tests to each individual. Time consideration for these tasks is the only limit to class size. At present, a class of thirty students required about fifteen hours of work per week on the part of the instructor. Better testing procedures are likely to insure more conscientious work on part of the student, and in turn, will reduce the amount of time spent with each individual and permit an increase in class size. Still larger classes will be possible, once an assistant or native informant has been well trained so that he can take over many of the instructor's functions. This aspect, however, will require further investigation.

2. Self-instruction on the adult level.

The well-motivated student, that is the student who usually plans to travel abroad and intends to use the language as part of his work, studies hard and is successful. He devotes from two to four hours a day to his studies and comes regularly to the laboratory. However, when the motivation is removed, that is when plans are changed, they usually stop coming. The effort to learn seems greater than the reward of merely speaking a foreign language. Those students who want to learn French just because it is a nice thing to be able to speak another language usually do not persist in their efforts.

Complete self-instruction without the usual trimmings of a regularly scheduled class, without regular meetings with the instructor causes the student to lose interest very soon. "I feel like an orphan" was the remark of one perceptive student who, however, did complete the program. A regularly scheduled weekly meeting with required attendance seems necessary. The student wants to be told that he is progressing, that his work is satisfactory, in reality that his work is pleasing to the instructor. The reward of receiving the approval of the instructor seems to be a psychological necessity.

The exclusively oral goals of the ALLP French Program might be another reason why some abandon their study. To the average learner, a language is a written phenomenon. If the prop of a written text is missing, he feels he is not learning the language, since he does not learn to read. For most people the immediate goal of a language course consists in the ability to read the foreign language.

3. The ALLP French Program.

A number of observations are reported here, observations which concern the strong and primarily the weak points of the program itself, as they became evident while watching the students' work:

a. Discrimination: The ability to accurately discriminate is basic to the entire program. How well the student does discriminate is therefore a question worth investigating.

In this program, discrimination is more than arriving at the instantaneous conclusion as to whether a sound is the same or not. To be able to make the same-different judgment, the student must remember the sound; he must actually memorize it, acquire an audio-image of it -- which is the purpose of the frames entitled discrimination.

The average student does not possess this ability when he begins his foreign language study. The first three problems were the most difficult task for everyone. Some students went over some frames a total of 14 times and still did not achieve criterion score. Towards the middle of phase 1, every student had acquired the skill and did achieve criterion score the first time in most cases, by the second or third try with each frame. It can be concluded that it is a skill which can be acquired by every one.

Sounds which are differentiated in English and in French by the same features or the same contrasts were confused by a number of students, a number estimated to be as high as 20 percent. For instance, the consonant /m/ was confused with /n/, /b/ with /d/, /v/ with /z/, /f/ with /s/, /ʃ/ with /s/. This confusion was maintained by some when they were reading and seeing symbols. One student concluded that the v symbol represented the /z/ sound, or the f symbol represented the /s/ sound. This confusion is so much more noteworthy that it occurred in utterances when only six consonants were used -- and the students knew about those restrictions.

The problem of under and over differentiation needs mentioning. Those students who consider wrong stimuli to be correct are underdifferentiating. They have not yet learned the sound. A sizeable number of students, however, overdifferentiate. They reject as incorrect many French stimuli, which are slightly different from the model given - a difference due to the phonetic environment. These students are able to detect slight variations of which the native is unconscious. A sound is not a single acoustical configuration; it has a range. In discrimination, the student must learn the range of each sound. This too is an ability every student has learned by the time he reaches the halfway mark of Part I.

The amount of discrimination training for most efficient learning of pronunciation bears investigation in future research. Pimsleur, Mace and Keislar (1961) found that discrimination training with certain sounds "did not render laboratory practice measurably more effective in producing good pronunciation". He suggests that for some sounds it is not a problem "of discrimination but of differentiation". The proper pronunciation was improved by practicing the proper sound.

Observing the students' achievements during the summer session in which the discrimination frames were reduced by fifty percent suggests an explanation different from Pimsleur's findings. Discriminating phonetic features is a skill which once it has been acquired, is operative when learning other sounds. Once the skill had been acquired, it was observed that students did correct their own utterances before they heard the confirmation response.

The better students tried to help the poorer ones by pointing out their mispronunciations and trying to explain to them how it should sound.

The results of the summer session confirm that on the one hand discrimination training was overdone in the ALLP Program, but that on the other hand discrimination is a useful skill in learning the phonetic features of the foreign sounds.

The sequence of the sounds in the very first problems where the student learns the skill of discrimination needs further investigation. The /a/ sound which begins the program is likely to be one of the more difficult sounds since there are a relatively large number of phonetic variations in English contrasting with the French sound: as in the words bag, about, mother. Furthermore the French /a/ sound tends towards the sound of the English bag in certain phonetic environments. The problem of the range of the French /a/ sound complicates the discrimination for the student. The /i/ sound is likely to be easier and therefore a better introduction to the skill of discrimination.

The discrimination skill is maintained through vocalization. In those frames, the student is presented with stimuli containing the English phonetic features. The student is instructed not to repeat these utterances. This structuring of the vocalization frames complicates the student's learning needlessly. He fails to respond where he should, or thoughtlessly repeats what he should not. In a revision, discrimination should be eliminated from vocalization frames.

b. The length of Part I (pronunciation): The summer session program in which Part I was reduced from 500 frames to 220 frames, and reduced learning time from an average of 90 hours to 30 hours produced results which are comparable in pronunciation to those achieved during the academic year. Part I of the program can safely be reduced.

c. Merits of withholding lexical meaning: During Part I lexical meaning is withheld. This total absence of meaning contributes largely to the feeling of discouragement on part of the students. On the other hand it does permit total concentration on pronunciation and probably speeds the formation of the new speech habits. Whether a very small amount of meaningful utterances added to each problem, particularly useful phrases would tend to deteriorate their pronunciation has been questioned. It is suggested that the addition of a moderate amount of lexical meaning will serve to motivate the student.

d. Discouragement: The problem of discouragement needs attention. It was frequently expressed by students in interviews and conversations. Half of the students who withdrew did so for this reason. At one time or another, a number of other students wished to withdraw for this reason, but were persuaded to complete the course. They felt that they were not learning through the oral approach, and that speaking was of least concern to them. They cannot see the need for accurate pronunciation. They take a foreign language to satisfy a requirement. They share the popular concept that language is a written phenomenon. Reading is, therefore, their sole objective, as much as they have any objective besides earning a passing grade.

Some factors contribute to the feeling of discouragement even among students eager to learn: the length of Part I, which is further emphasized by the fact that lexical meaning is withheld, the fact that reading was not introduced until late in the program, which troubled particularly the visual-minded student, the slow progress of those students who either fail to study the required number of hours, or are by nature learning at a slow rate, boredom engendered by the dirth of meaning in pattern drills. Some of these factors will have to be remedied in a revised version of the program.

e. Difficult portions of the Program: Some sounds were much more troublesome than others, as was to be expected. The closed and open variants of /e/, /o/, and /õ/ need more explanation and drill. The student is aware of differences in sound, but is at a loss whether or not to accept the differences as correct variants.

Open /o/ and open /õ/, closed /o/ and /u/, the /e/ and /i/ sounds tend to be confused.

Part I of the Program presents the syntactical morphemes visually through the phonemic transcription system. The traditional empty space before and after these little function words is used to isolate them as separate units. This device has one drawback: The student then falls in his native syllabification habits of adding a juncture after the consonant and before the vowel. In /il a ê ʃapo?/ the student adds a juncture before /a/. In a revision, this problem needs attention.

Some syntax frames in Part I present undue difficulties. At this point the student cannot cope with eight syllable utterances in which some morphemic change is to be made in the middle. The learner does not yet know where a word begins or ends. This same lack of word identity makes it difficult for the student to deal with words beginning with a vowel sound.

Part III of the ALLP *French Program* had its difficult spots. In general, the student progressed much more slowly than during Part I. New habits had to be learned with every problem. Each problem also incorporates the previous structures which tend to compound the difficulties. The frames teaching the *passé composé* and the pronouns proved to be the most difficult and the most time consuming - as is well known to every teacher. They tend to discourage the student because much repetitions is needed.

The frames *between 900 and 1000* are discouraging for many. The student wants to talk. Yet, the structures and vocabulary are not yet well established habits. He is conscious of his inadequacy and hesitancy. Interference from the native language is at its strongest at this point. When the student seeks a word or a structure he automatically turns to English; he formulates his thought in English and seeks to translate the words. In such a case the instructor must help:

1. By asking only questions in which the student is well drilled and can answer without difficulty;
2. by insisting that he answer with what he *can* say, not with what he wants to say;
3. by demonstrating how to answer using the elements of the question, and sometimes making an intelligent guess;
4. by praising wherever possible.

Learning through the ears exclusively is frustrating for many students who are visual minded. Sawyer (1962) concludes that there are indications that students may benefit from training with a text before them, especially if they are drilled in a laboratory situation with reduced motivation and reduced social stimulation. Articulatory fluency as well as the learning of meanings and syntax appeared to benefit from the availability of a text. The study by Mueller and Leutenegger at The University of Florida (1964) suggest that the audio-lingual emphasis is a frustrating experience and the cause for a number of drop-outs from the class. "Significant discrepancies in four of the Seashore Measures between the group of students who dropped out and those who finished the course seem to lend further weight to the theory that these students had too much trouble with learning through the ear exclusively". A comparison of the work during the academic year with that of the summer seesion, where the students had much more visual help from printed voicing scripts, supports this observation.

The diction of the native voicers may be a factor in the students' comprehension difficulty. The speakers had been trained to speak naturally, that is without particular stress on diction, with what is for them a normal speed of delivery. They were students without training in precise speech. Thus their speech is close to what could be heard in the home of the educated Frenchman. In such speech habits, the consonants lose their crispness and the utterance loses some of its distinctive qualities. Although completely understandable to the native, the non-native, knowing French well, often has to listen twice.

This phenomenon is quite familiar to the investigator for whom English is a foreign language. After almost twenty years in this country he cannot catch many utterances when spoken in the informal language. The argument that in language training the stimuli presented must be spoken just as they would be heard by the learner in the streets of the foreign country overlooks one factor, Speech is never an assemblage of disconnected sentences or expressions as they are found in a pattern drill. Lack of comprehension as experienced by these students is a common experience among natives when there is a sudden and unexpected change of subject by the speaker. The native understands the informal speech because he expects in part the remarks he hears and because they center around a given topic.

Greater precision in diction should be used by speakers in drills which are a conglomeration of disconnected sentences. Greater precision is not to be interpreted as speaking more slowly than is normal for a Frenchman. Slowed down speech is not natural and introduces junctures and other phonetic and intonation features which later create more problems than they solve. Greater precision means more accuracy in the consonants, greater tension particularly in voicing the consonants. The consonants give each syllable greater distinction. Such an improved diction will compensate for the lack of general and meaningful topic. The informal speech is to be retained in the dialogues and the exercises which follow them.

The time pause provided for student response between the stimulus and the confirmation is adequate only for the better students. It seems that a uniform pause is not suitable for every student. Some talk slowly even in English, take time to formulate a reply or hesitate. They will talk with the same slowness and hesitancy in French. To provide a pause long enough for the slow student would be boring for the fast speaker and waste much of his time. If the student lacks time to respond he should make use of the pause button on his tape recorder. On the other hand he should make an effort to respond as fast as possible. Too liberal use of the pause button may encourage the student to translate to and from English and thus defeat the very purpose of the drills.

f. Cognates: Cognates, that is words which are the same in English and French such as danger, decide etc. or share a common and easily recognizable stem such as unir, are frequently used by French teachers for greater divergency in conversations or for explaining new vocabulary items. Such cognates, however, are nonexistent in the spoken language. The student is not able to recognize them in speech. In using this Program, teachers, therefore, must restrict their conversation to the vocabulary which has been learned. The difficulty to do just that is even greater than in the average course since every student is at a different point; this makes it almost impossible to know what vocabulary range can be used with each student in the display sessions.

g. Reading: The reading skill was taught after the student had completed two thirds of the ALLP Program. Introducing the student this late to French spelling has certain drawbacks. The phonemic transcription system was well established and was responsible for many of the reading errors, particularly the confusion of the /u/ sound with the u symbol, the /e/ sound and the e symbol. There was furthermore not enough time left to practice reading skill.

During the summer session the Reading program was introduced immediately after Part I, that is to say as soon as the student had mastered the pronunciation system. At this point, the phonemic transcription system is not yet established well enough to interfere with the new habits to be learned. However, it requires diligent monitoring, since at this point the pronunciation habits are not yet well enough established. There is more interference with the new pronunciation from the native English through the written symbols, which are taken from the Roman alphabet. The reading frames are, therefore, also pronunciation exercises, if the pronunciation skill is not to deteriorate before it has had a chance to become a well established habit. This fact must be explained to the student to impress upon him the necessity to maintain good pronunciation.

Among the students who had some training in French in high school or college, it was noticed that some carried their former bad pronunciation babits over into reading which they did not make when speaking.

These observations further demonstrate that reading must be taught systematically. It cannot be assumed that the student who can talk well is able to read with any degree of accuracy. This is true even if the reading skill is delayed for almost the entire first year.

Once the student has begun the Reading Program he should complete it in the shortest time span possible. Stretching it over several weeks is self-defeating. The student seems to forget too much from one session to the next if several days intervene. He then spends more time reviewing then learning new habits.

After the Reading Program has been completed much more practice is needed to maintain the skill and improve speed and fluency. The student is requested to read the dialogues of Part III and Part IV. He reads them after he has learned to pronounce them. In addition cursory reading should be practiced. It can be undertaken anywhere in the second half of Part III of the Program.

h. Merits of giving explanations: On the advice of the Project psychologist, the original program contained no explanations to the student. The student was instructed to listen to the model, to learn to discriminate as best he could, and to imitate it. The revised portions, done after experiments in Gainesville, contained explanations which verbalized the phonetic features of the model and contrasted it with the incorrect stimulus. The first six problems contained these explanations on tape. When the students came to the later problems without these explanations they found their task more difficult, and asked for guidance. One case should be cited. Those students, who were absent when the explanations about the /k/, /p/, and /t/ were given, had much more difficulty with these sounds. Some did not discover what were the essential features distinguishing the sounds in the foreign language from those in their native tongue. They were aware of differences, but could not differentiate between the correct and incorrect utterance. In vocalization, they used the English sound. In a revised version this information should be given for each frame, either on tape or in print, or perhaps both. The best results are obtained when the student is given the contrastive analysis when he meets the problem, rather than several days before.

4. The Learning Process Itself.

Trial use of the ALLP French Program permits a number of observations about the learning process and the circumstances surrounding it.

a. The equipment.

Before actually trying out this Program, it had been thought that an audio-active laboratory with ten master channels might be all that would be necessary. This however proved to be a misconception.

The following equipment seems to be the minimal requirement:

1. a high fidelity tape recorder for each individual. No two students learn at the same rate. Each student therefore must be able to control his own source at all times.

2. a pause button for each tape recorder. It will permit the slow student to pace himself. Even the good student at times needs to stop the machine somewhere for a moment.

3. Record feature permitting the recording of the student's response on the bottom half of the tape while the upper half furnishes the stimulus. This feature is essential in all the vocalization frames of Part I. It should also be used when the student takes a test. In Part III and IV, very few students listen back to their performance. Self-correction of the grammatical feature is frequently observed after the confirmation answer has been heard. At that point the pronunciation is well enough established, so that little attention need be given to it.

4. A digit counter. Every tape is started with the counter set at 000. At the beginning of each frame the student notes in his book the number of the digit counter. This permits finding a particular frame quickly and accurately. A digit counter will save much time.

b. Attitudes and Motivation.

The advocates of programmed learning often point out that programming carries its own reward and therefore is the most powerful motivation for the student. In the beginning, the student takes pleasure in completing a large number of frames and acquiring a new skill. But as the hours of hard and concentrated work accumulate, as the student meets with difficulties, his initial enthusiasm soon disappears. If the student is not motivated to learn how to speak a language the task is much harder. Completing frame after frame is not enough of a motivation to invite the student to do his best. Furthermore, the student who has a hostile attitude towards the language, the country or language learning in general profits very little usually from the program. He retains a strong American accent. Unfortunately the psychological test that was administered does not measure this particular aspect.

c. Conditions for effective learning.

The effectiveness of learning depends on a number of factors:

motivation, sequencing of the material, learning habits etc.

The separation of the speaking skill of a language into the five original tasks of the ALLP Programs was evident in the ALLP French Program, with some modification. In this procedure, lexical meaning is withheld from the student for a very long time. Consequently, it induces boredom, reduces motivation and interest, and therefore is not as efficient as visualized at first. When lexical meaning is introduced in Part II, the student is much relieved, and seems to work better. It is therefore suggested that the introduction of lexical meaning in Part I at the conclusion of each problem will help in achieving a greater and more sustained motivation.

Likewise, the ability to read, a skill introduced at the end of Part I during the summer session did help the student while working through Parts II and III of the program. The observations made during the summer session tend to confirm the theory of more effective learning, if the student has a certain amount of written material before him.

During the summer session, writing was also taught more systematically than during the academic year. The student wrote out as homework each evening a small amount of frames after consulting his grammar to find out how the structure under study was spelled. It was observed that a number of students took notes in the language laboratory while studying orally. They copied a vocabulary item or wrote out a structure. These are habits which have been acquired over many years of schooling, even before coming to college. It can be concluded that writing has some reinforcing qualities, primarily because of its wide practice in our schooling.

The most effective sequence of material, therefore, seems to consist of Part I, which should include a minimum of vocabulary learning at the end of each problem, then the Reading Program, then Part II, Part III with the requirements of writing a small number of exercises in each problem, and finally Part IV.

The amount of time the student spends in one block is one of the conditions of effective learning. The student who devotes only five hours a week to the program seems to need more total time for the program than those who devote ten or twenty hours a week. Furthermore, he is very much more prone to discouragement. He seems to forget too much between the individual sessions. The student who devotes as much as twenty hours a week may also get better results in pronunciation and fluency. During the summer session, the students spent no less than thirty-five and up to fifty hours per week for an eight week period. This amount of concentration might be the most effective. During a large portion of the day the student does not speak any other language but French if, obviously, the number of breaks is kept to a minimum. Most students worked from eight till noon with perhaps one or two ten minute breaks, and resumed work after an hour for lunch until three or four in the afternoon. No particular discomfort was noticed. Some were able to concentrate to the point of being completely oblivious to their surroundings.

A certain time concentration seems essential for best results. The establishment of a skill may require a given number of hours spent in a limited time span.

d. Knowing how to learn:

Some students, particularly those with a very low aptitude rating have great difficulties in Part III (syntax). Their problems consist primarily of:

1. Inability to proceed by analogy. They are unable to recognize a pattern, but tend to learn each item as a separate form.
2. Total lack of memorizing skills. They have great difficulty in remembering the various endings and in relating them to the proper signals, such as subject pronouns and verb endings.
3. Inability to respond if a single word of the stimulus does not evoke an immediate English equivalent. English seems to be the vehicle used to replace the above mentioned deficiencies. These students seem to transliterate the French stimulus into English, formulate an English response and then seek equivalent French words. For these students language is only a matter of words.

In such a case, the learning process was explained in great detail and specific advice was given on how to proceed. The pattern concept was explained, using, as examples, meaningless English words. The student was shown that there is a definite system, even in the irregular verbs. He was then advised on how to proceed in memorizing; namely, to make flashcards, containing on one side the singular form of the verb, on the reverse side, the various plural forms, the infinitive, and later the past participle. He was told how to use these flashcards frequently at home. He was further advised on how to study in the laboratory with the taperecorder: He was told to stop the tape after the confirmation answer and repeat the response five times before proceeding to the next stimulus. He then repeated the same frame again, responding in the length of time provided by the pause. He was finally advised to disregard the English meaning completely until he reached those frames where meaning was important to formulate the proper response. As long as the student is learning the code or the structure of the language, he should learn to respond mechanically to specific signals in the stimulus.

Some students find repetition of any kind extremely tedious. They are often intelligent students with many interests. But working through exercises designed to impart a skill is difficult for them. They care little about accuracy in their responses, respond vocally to only half the stimuli and never correct themselves after the confirmation answer is given. They are quick to understand intellectually the principle involved, but they do not understand what it means to master the pattern studied. They are easily spotted by checking how fast they work through the program. The fastest student is not necessarily the best language student, but might well be a student who is racing through the frames once without ever playing back any of his responses. The instructor or lab supervisor must check and determine the study habits of his students. Such an individual must repeat the exercises until perfection is achieved. The standards the instructor establishes in the beginning of the course will be responsible for his later success or failure.

Some other students have a tendency to write out the responses whenever they meet a difficulty. The writing habit is so deeply ingrained that it can be called an instinct. It is noticeable even with one of two two seventh grade students. They are convinced that they can solve all learning difficulties including speech if they write it out. Naturally, their concern with spelling supersedes all other considerations. Their oral responses tend to be slow, since they try to read out the answer from a mentally written script. Such students are advised to leave their writing implements at home and are encouraged to make oral responses until the correct response comes out automatically. This advice is reinforced by testing these students orally rather than through written answers on paper, by downgrading the importance of spelling when a paper is returned, and by emphasizing the importance of correct oral responses in the grading of their performance.

Many students have a very short oral memory span. They seem to be unable to store the sound signals of an average length utterance for interpretation until the utterance comes to its conclusion. They interpret every syllable or word as they hear it and soon lose track of the utterance. They cannot repeat a two word-group stimulus without hesitation or/and distortion. Memorizing a four line dialogue is nearly impossible and never accurate. It is a new translation process at every recitation with new variations in every line. During the display sessions, when other pressures impinge on the students, their responses are very slow, inaccurate, and usually literal translations from English, one word at a time. They say that they do not understand the speaker, that the stimulus is spoken too fast, that they cannot remember the end of the sentence.

This inability to remember the spoken language may be encouraged by the dalogues of the present ALLP Program. The student is never faced with unexpected materials. Before he begins the dialogue, he is given a translation. During his learning he sees the text in front of him -- one student has been seen writing in the English equivalent over the French word, recopying it from the translation a few lines above. During the question and answer period, the questions are always in front of him. In a revision the existing dialogues and questions with several variations should be added to the existing materials and no script should be available to the student.

These students are furthermore advised to learn to memorize. They must memorize one short dialogue every evening for a few weeks until they can do it with ease. In every exercise which gives trouble, they are told to repeat the stimuli and response until they can say both without hesitation. They are told to respond without reading the answers and without looking at the written stimulus while responding.

Another device which reverts to the original concept of the ALLP Programs is also helpful. The student is made to respond to stimuli using key vocabulary items unknown to him. He manipulates them and changes the structural signals until he can do it without hesitation.

In contrast to these observations about the difficulties met in learning, the characteristics which the good student displays are worth mentioning, since they are not measured by the aptitude test. Such a student has a specific attitude toward learning: he takes pride in every little achievement; he is meticulous at every step and performs his task conscientiously, whether monitored or not; he also has an optimistic attitude about his ability to succeed. He knows that he can learn, no matter what the difficulty! his seriousnees about learning shows in the few, short breaks he takes. When he works, he is able to concentrate to the point of forgetting his environment; he does every frame until he is satisfied; and, at times, he even has to be told not to spend so much time with a given item which will be repeated in subsequent frames.

e. Previous training in French

In each of the learning situations in which the program was used, a number of students had taken French courses either in high school or in college. If in college, it was so long ago that they needed a refresher course, or because they had failed the course itself. If in high school, their placement test was so low that they were not judged capable of pursuing French on the second year level.

The effects of their previous training is of interest. They had an advantage in so far as they could recognize vocabulary and remember it more easily than the students without previous French. They were also more familiar with the spelling system which helped them when writing French. These advantages were balanced by some disadvantages, however, their pronunciation was poor in general at the beginning of the program, and it was more noticeable when reading aloud. Some showed evidence of transliteration habits when they attempted to understand or answer questions. The influence of their native tongue was probably stronger because of their past habits of translation than if they had been without this prior experience with French. In general, they do not demonstrate greater mastery in any of the language skills than the others. They need as much time as the others to complete the program.

VII. Results.

This section presents the achievements of the students who registered for the French Program during the academic year and the results achieved by the students in the control sections. It included those scores which were available for the students in the summer session. The tables presenting the results of the Program during the academic year include two students who were enrolled in the Department of Special Programs. Most of the students enrolled in the home study program did not take the final examination because they did not complete the work at the date of this writing, or because they had left earlier for French speaking countries in line with their work.

No attempt is made to compare the students in the experimental section with those in the control sections for purposes of assessing which is the better teaching methodology. The control sections are adduced as an illustration of good achievements against which the strong and the weak points of the Program are measured. Such a comparison points out primarily the areas in which the Program needs to be improved and revised.

A statistical analysis does not seem feasible at this point, since the number of students involved in the Program is very small and since equivalent information about student aptitude is not available for the students in the control sections

1. Drop-outs.

The following chart summarizes the number of students who completed Beginning French and the number of students who dropped out:

	Completed		Dropped Out	
	number	percent	number	percent
Program Academic Year	23	68	11	32
Program Summer Session	11	64	6	35
Control Sections Academic Year	36	46	42	54

A drop-out of 54 percent in the control sections is normal at The University of Akron. Only about fifty percent of the original Fall enrollment completed the second semester of the Beginning French Course during the five years preceding this study. From past experience at other institutions a fifty percent drop-out rate during the first two semesters of a beginning foreign language course seems normal.

The percentage of students who dropped out of the Program - 32 percent during the academic year and 35 percent during the summer sessions - is considerably lower. However, seven students who followed the program during the academic year -- 20 percent of the original enrollment -- completed their work from four to ten weeks late. Only one of these students did so because of extended illness. Most of these seven students wanted to drop out of the course at one time or another because they were behind schedule and could not keep up with the class.

The drop-out rate of 35 percent during the Summer Session is slightly higher than the rate during the academic year. The increase might be attributable to the much lower aptitude of the entire class compared to the aptitude during the academic year. Conflict with working hours is the reason given by one student who dropped out in spite of a high aptitude.

Five students finished the course after the close of the eight week session. Two of the five needed only as many days as they missed during the summer session.

Students normally drop a course because of poor test results which serve as an indication that they are in danger of receiving a poor grade. In this program the students did not get poor grades, but were not permitted to advance further until a high criterion score had been achieved. This resulted in more hours being spent with French for the less gifted student than they might have spent with another course. Such extra hours are just as aversive as poor grades.

The Program was furthermore of an exclusively oral nature, at least during the academic year. The studies at the University of Florida revealed that the drop-out rate increased when the oral skills were emphasized. The oral emphasis of the course at the University of Florida proved aversive. It is worth pointing out that the drop-out rate was significantly reduced in spite of the fact that the French Program was exclusively an oral learning experience.

The smaller percentage of drop-outs from the French Program compared to the drop-out rate of the control sections may well be attributable to the features of programmed learning. Breaking up the learning task into minimal steps, reinforcing each response and, above all, allowing each student to proceed at his own pace, solved, to a large degree, the problems inherent in the oral approach. Additional improvements in the Program designed to reduce the clash between the student's learning habits and the oral nature of the task, and other additions which will reinforce language learning through reading and writing tasks, might further reduce the percentage of students who for one reason or another feel they must abandon the course.

The need for more time than allowed during the assigned time span by a sizable segment of the student population is a serious administrative problem created by the Program in its present form. It does require the presence of the instructor above and beyond the time for which he has been hired, several weeks after the close of the academic year or after the close of the summer session. It also requires the availability of the language laboratory and interferes with scheduled repairs or alterations.

The solution to this problem lies in the reduction of the Program wherever possible and other revisions which will speed up the learning process and will permit the low aptitude student to complete the assigned task within the time alloted for it. The proposed solution, however, will in turn create another problem, namely what to do with the gifted student who then will complete the Program several weeks or even a semester before the conclusion of the academic year. This question also needs a solution, since the student who will not have contact with French for four to five months will through disuse forget the skills he has acquired so laboriously and is in danger of developing an American accent in his pronunciation and of transliterating the English grammatical structures into French.

2. Overall Results.

The following chart presents the results obtained in the MLA Test.

	Median Score	Mean Score
Program Academic Year	142	142.26
Program Summer Session	170-149	158.-
Control Sections Academic Year	160-158	154.25

The obviously inferior overall results of the students registering for the French Program during the academic year might be attributed to the Program itself. The stated objectives of the ALLP French Program consisted of the oral skills only, i.e. speaking and oral comprehension. Reading and writing were not included as terminal behavior. The written skills were added when the Program was to be tried out with a college class. It was assumed, somewhat naively, perhaps, that the student who could speak the language would have little difficulty reading and writing it.

The significantly lower drop-out rate in the Program is also reflected in these figures. A number of students were retained in the Program with very low foreign language aptitude. (35 to 5 percentile MLAT). Their probablility for failing an average First Year French Course would have been very high. The students during the summer session included a number who had attempted French or another language in college and had failed. It seems that these students were able to succeed because of programmed learning.

The overall results obtained during the summer session reveal a substantial improvement even though the aptitude of these students was much inferior to that of the students during the academic year -- three fourths of the summer students ranked in the lower fifty percentile, while only one third of the students during the academic year belonged to that same group. The results during the summer session reflect the changes made in the Program itself and in its administration: introducing reading after Part I (pronunciation) assigning a greater amount of reading than during the academic year, and writing introduced with Part III.

Learning in our society is primarily a visual process requiring much reading and writing. An exclusively oral approach to foreign language learning meets the student at his weakest point. It seems, therefore, reasonable to conjecture that given the learning conditions prevalent in our society, the introduction of reading, the written stimuli and the writing exercises reinforce the oral skills the student attempts to learn. Observing the learning behavior of the individual, including one of the seventh grade students, certainly confirms this assumption.

The stated objectives of the ALLP French Program have been accomplished. Every student speaks with a degree of correctness attained only by the better students in the average course. Their pronunciation and intonation reveal a minimum of influence from the English speech habits. The most common structures of the language are familiar to all. There are differences in fluency and speed of speaking. The best are fluent and can talk for ten minutes at a speed which can be called slow normal. At the other end of the scale, the slow student takes time to formulate an answer, pauses between sentences and word groups, but talks normally in word groups and not one word at a time.

The ALLP Program, however, must be revised in several areas in order to meet the objectives of a first year college course.

The overall results obtained by the control sections deserve to be pointed out. The median score of 157 represents a 72 percentile rank, or a low B when compared to the percentile ranking provided by ETS. It is true that the scores reported by ETS are based on a small sampling. They do, however, represent a variety of colleges and universities.

3. Speaking.

The results obtained in speaking on the MLA test are given in the table below:

	Median		Mean	
	Score	Percent	Score	Percentile
Program Academic Year	50	97	49	97
Program Summer Session	48-45	94-92	48	94
Control Section Academic Year	39	76	38.63	76

The examination was corrected according to the instructions given in the Manual provided by ETS. It was corrected by three instructors, one belonging to the control sections, a staff member who had not taught a section of the course and the investigator. Their judgment of the student's performance varied usually not more than four to six points from the lowest to the highest score. The high scores achieved by a number of students in the control sections demonstrates the high quality of audio-lingual instruction which these students have received and the high standards being maintained in the French classes at the University of Akron.

The general high performance of the students in the Program was expected and was the principal aim of the Program itself.

The oral performance of the students in the Program was evaluated by Professor Frederick Eddy of Georgetwon University. His complete evaluation is reprinted in the appendix. His report about their pronunciation emphasizes the French characteristics of their speech habits, as evidenced in their reading:

I found this tape fascinating. What it reveals, combined with the observations made in the individual oral exams, points the way toward the substantial contribution that the Program is making toward teaching good French speech habits. My observations on the tape appear below numbered. They go, more or less, from the general to the specific. No individual ratings are given; my time is too limited.

1. The student is alone before the mike, His performance is, in general, noticeably superior to that of the oral exams. He is relaxed, fairly assured, in many cases quite effective.

2. This bears out one of my observations: the student, alone in the booth with the mike and his materials, is on very familiar ground. Face to face with me, a total stranger speaking French, he was advancing into unknown territory every step of the way.

3. His rendition of the page of French, dialogue and narrative, was effective in spite of his relative lack of practice, evidently, in reading. None had really excellent control of the relationship between spoken and written French.

4. But--here is the crucial point--all have something much more basic and much more important: the ability to

produce a stream of speech whose characteristics are no longer Anglo-American, but more or less French, in some cases very French.

5. In all cases but one, I have the impression of listening to French read by a non-native, but only here and there is it evident that the student's own language is English. In other words, the student's native-language phonology is no longer dominant, and here is a very important step forward. The one exception was Student No. 16 (female)--that is, No. 16 in my report.

6. If I had time, I could report in detail on those elements of French phonology present and of English phonology absent that support my Observation 5 just above. It will have to suffice here to say that the entire range of segmental and suprasegmental phonemes would be treated, as well as quite a lot of allophonic detail. I regret that lack of time compels me to stop here.

It might be added that student number 16 referred to above had French in high school. She studied at home exclusively, thus withdrawing completely from the control of the Program. She resented and expressed resentment against this new way of learning. Most of her work was concentrated in the three weeks before the end of the semester when she hurried through the materials to be able to say that she did the work. She does not represent the performance of a student who faithfully used the program.

It is significant to note that the students in the summer session achieved about the same results as those during the academic year although Part I of their program had been reduced by half and reading had been introduced immediately after Part I. These results support the hypothesis stated earlier that Part I of the original Program was much too long, and overemphasized the role of discrimination training. Furthermore the early introduction of reading does not have any adverse effect over the student's eventual speech habits. The results are so much more significant since the students in the summer session had as a group a much lower foreign language aptitude than the students during the academic year.

A further remark should be added concerning the speaking test itself. It fails to test a large segment of French phonology, elements which are essential and would further point out the performance of the students in the Program. The plosive consonants in initial and final position, the voiced consonants in final position and some vowels such as the /a/ and the /u/ should be tested. The intonation which is mentioned in a number of utterances obviously refers only to the general intonation contours of the utterance. It does not test whether the student's voice tends to rise at the end of a non-final word group as opposed to level or falling juncture so typical for English. The French open syllabification habits versus closed syllabification of English should also be included in such a test.

The more common mispronunciations occurring, if not persistently, still often enough to receive further attention in a revised version of the program, consist of the following features:

> The front vowels /ö/ and /ü/;
> the nasal /ã/ and the distinction between /õ/ and /ã/;
> the /o/ before /n,m/ tends to be partially nasalized;
> open syllabification needs further stress, particularly
> with liaison which crosses the word boundaries.

4. Listening Comprehension.

The results obtained in listening-comprehension on the MLA test and on the Co-operative Listening Comprehension test of 1956 are illustrated in the following table:

		MLA		CO_OP	
		Score	Percentile	Score	Percentile
Program Academic Year	Median	26	71	20	40
	Mean	25.26	69	20.30	43
Program Summer Session	Median	24-22	60-50	17-13	17-5
	Mean	22.16	56	15.5	13
Control Sections Academic Year	Median	28	77	21-20	50-40
	Mean	27.16	71	21.08	50

The low performance of the students in the French Program is surprising. They had a decided advantage in having heard several French voices and in having had more experience with the oral language. They are considered to have a greater mastery of the oral structures than those in the control sections.

Several explanations seem to be plausible. The lower drop-out rate in the French Program retained a number of students who would have dropped out of the control sections. Their lower foreign language aptitude is evident in the above comparison of the listening scores.

The students in the control sections had an advantage over those in the Program since they came in contact with a much larger vocabulary during their studies. There is furthermore a difference in the nature of the vocabulary taught in the Program versus that taught in the control sections. The vocabulary taught in the average textbook is oriented toward literature or at least toward the formal language, a vocabulary the student would meet in his reading in subsequent years. The vocabulary taught in the Program is oriented toward the informal language and revolves around food, clothing, the activities of the house, in the street or in the shops. It is assumed that the student taught in the Program will go to France at the end of his training. The test naturally favors the more formal vocabulary.

The same distinction between formal and informal language can be adduced in the grammatical patterns. The formal language, for instance, uses the inverted word order to formulate a question. The informal language of the Program prefers by far questions with est-ce que or simply through intonation. The test again, and particularly the Co-Operative Listening Comprehension test, favors the very formal language.

A further explanation might be found in a weakness of the Program. During his class session the student in the control sections is constantly exposed to utterances containing a word or two with which he is unfamiliear, either because he has forgotten the meaning or because a new word did slip into the speech of the instructor who does not realize that it is an unfamiliar word. After a number of weeks the student is quite accustomed to interpret speech with such lacunae in vocabulary. This is a necessary skill in comprehension of both native and foreign language which is lacking in the students who followed the Program. The Program accurately controlled the introduction of every new vocabulary item. It was presented visually at first, usually in phonemic transcription, so that vocabulary items would not distract from the pattern to be learned. In the dialogues again, the vocabulary was introduced first through the English equivalent presented before the text of the dialogue itself. During the display sessions, the student, rather than the instructor, did the talking. As a result, the student never was exposed to speech containing unknown elements. He never acquired the skill to interpret from context, or to disregard elements which were unfamiliar to him and continue listening for what he could readily understand. Hearing an unfamiliar word attracts his attention and causes him to lose the thread of the discourse. He hears the one word in ten which is unknown to him, rather than the nine which are known.

A revised version of the Program should give attention to the development of this skill. It is suggested that the dialogues be repeated with variations by different voices and followed by further questions. Both the new dialogues and the additional questions should be presented to the student without script or explanations. Part IV (conversations) should be expanded in the same manner.

5. Reading

The results obtained in reading on the MLA test are given in the chart below:

	Median		Mean	
	Score	Percentile	Score	Percentile
Program Academic Year	29	50%	26.69	43%
Program Summer Session	33-29	61-50%	29.8	50%
Control Section Academic Year	38-37	78%	35.86	68%

The results achieved by the students in the Program during the academic year reflect the fact that reading was not one of the aims of the original ALLP Program. The same remarks made about the inability to comprehend speech containing unfamiliar vocabulary items and the difficulties induced by a test stressing the formal language applies here even more. These students were not trained in extensive reading and lack the ability of interpreting a text from context. Their attention focuses on the unknown word rather than on the familiar material. It must be pointed out furthermore that one third of these students had not read the _Petit Prince_ before the test was given and therefore had no experience whatsoever in cursory reading. They completed the assignment in the _Petit Prince_ after the test.

The results obtained by the students in the summer session were somewhat superior to those obtained during the academic year because these students had much more practice in reading. The exercises presented in writing in the _Supplement_ served as stimuli for an oral review of their home work. Although this type of reading is in itself not likely to develop cursory reading skill, it did provide reading practice and made the written page more familiar to the student. Furthermore, the stories added doubled the amount of reading assigned during the academic year. In addition, those students who were found to be inferior in their reading comprehension were given additional materials for more practice at their own leisure.

6. Writing.

The following chart presents the results of the MLA writing test:

	Median		Mean	
	Score	Percentile	Score	Percentile
Program Academic Year	41	40%	40.39	33%
Program Summer Session	66-61	81-67%	58	67%
Control Sections Academic Year	57	67%	52.86	58%

The performance of the students in the _Program_ during the academic year was expected since writing had not been taught and was not part of the original _ALLP Program_.

Students spell words and grammatical endings as they sound. Maintaining the phonemic transcription throughout the _Program_ as the only written symbolization resulted in a total confusion between the phonemic transcription and the spelling system. The student was often unaware that he mixed the two systems in a single word. Furthermore, in their writing occurred structural mistakes, that is errors in the pattern, not present in the students' speech. This leads to the conclusion that in his attempt to write, the student is much more influenced by the English language system than in his speech where the patterns are more firmly established and have become habits.

The results obtained during the summer session were much superior over those of the academic year, and even exceeded slightly those obtained by the control sections. A modest amount of practice is the logical explanation for this improvement. Beginning with Part III of the Program the student wrote out one exercise in each problem and compared his responses with those printed in the Supplement. He wrote out the examinations after the oral performance and corrected each mistake before the instructor's eyes.

7. General Acceptance.

The interviews between the Head of the Department and the students at the end of the first semester reveal a number of dissatisfactions with the Program and expressions of doubt as to their learning the language. Professor Eddy in his interviews noted that their attitude had changed to wholehearted acceptance. He found a few who "having taken this course, were interested in going on to a French major." Following is the portion of Dr. Eddy's report relating to the students' opinion:

> In the last minute or two with each student, I got and summarized in writing his response to this question:
>
> "A friend of yours is taking French next year. How would you rate this course for him, as compared with the standard course in Beginning French given on this campus? Please select one of the following:
>
> 1. very high
> 2. high
> 3. not sure
> 4. low
> 5. very low
>
> Note that some students gave two ratings of the course,

one for prospective majors in French, one for non-majors.

Next to each rating I summarized the subject's comment in answer to my last question, "Please explain your rating in a few words."

In an oral exam like this one, so unusual--alas! --on American campuses that the students are for the most part very nervous, even scared, it is not easy to judge student reaction to the course and the materials. However, I did get the over-all impression that these students were interested and challenged by the materials, the methods, and the teaching personnel. Most important, perhaps, is that they seemed to have a healthy respect--sometimes admiring, sometimes grudging--for the amount and quality of work required to complete the course as compared with the standard course in Beginning French. That their opinions were on the whole favorable is shown by a glance at the column headed "opinion". That their opinions were reached after taking some serious and realistic thoughtseems quite clear after a careful reading of the last column, "reason for opinion".

8. Correlation between Aptitude and Results.

The relationship between the student aptitude and the results obtained might yield valuable information for future users of the French Program. If a correlation can be established, it could be helpful in advising the student about the amount of difficulty he is likely to encounter in the course, or the time needed to achieve satisfactory results. Such a correlation would also help the instructor in preventing weaker students from dropping out.

Programmed learning theory suggests that there should be no difference in results between those with high and those with low ability since the learning process is reduced to minimal steps and each step must be mastered before the next. Language specialists further point out that, if language is a skill, then anyone who learned to use one language can learn to use a second. However, since every student advances at his own pace, the less able student will take longer than the gifted student.

These predictions are not borneout in this study if the student's aptitude is compared with the total result scores. There is a positive correlation between the student's aptitude as measured by the MLAT and the total scores achieved in the MLA examination. The following tables illustrate the relationship between the student's aptitude, the results, their previous knowledge of French, drop-outs and late finishers.

CORRELATION WITH APTITUDE

Academic Year 1963-64

	APTIT		RESULTS SCORE	PREVIOUS FRENCH	DROP-OUT	LATE FINISHER
	#	%				
1	164	99	162	no F		
2	154	95	175	HSF		
3	145	90	149	no F		
4	144	90	115	no F		
5	142	85	181	no F		
6	139	85	107	no F		
7	136	75		HSF	*	
8	135	75		no F		not finished
9	133	70	142	no F		
10	130	70		no F	*	
11	128	65		HSF	*	
12	126	60		no F	*	
13	126	60	161	HSF		
14	125	60	119	HSF		finished late
15	123	60	148	no F		
16	121	55	159	no F		finished late
17	118	50		no F	*	
18	118	50		no F	*	
19	117	50	79	no F		
20	116	45	93	no F		finished late
21	105	35		no F	*	
22	105	35	140	HSF		
23	105	35	100	no F		
24	101	30		no F		not finished
25	98	25	122	HSF		
26	92	20	181	HSF		
27	88	15	119	HSF		
28	81	10		no F	*	
29	74	10	94	no F		finished late
30	57	5		no F		not finished

NOTE: HSF means that the student had High School French.
no F means that the student had no previous French course.

CORRELATION WITH APTITUDE

Summer 1964

	APTIT		RESULTS SCORE	PREVIOUS FRENCH	DROP-OUT	LATE FINISHER
	#	%				
1	150	95		no F		not finished
2	146	90		2yrs.HS	*	
3	125	60	171	no F		
4	123	60	139	1 sem. AU failed		
5	117	50		no F		not finished
6	116	45		AU failed		not finished
7	115	45		no F	*	
8	112	45		no F		not finished
9	111	40	149	lyr. HS		
10	107	40		as a child from parents	*	
11	107	40			*	
12	107	35	182	2yrs. HS		
13	103	30		One sem.at college	*	
14	100	25			*	
15	96	20		2 sem. U of Dayton - F		not finished
16	89	15	170	4yrs. HS		
17	78	10	138	2yrs. HS long ago		

The following summarizes the relation between aptitude and overall results:

MLAT	Results
99-95	147
50-5	124

In general as the aptitude of the student decreases the results also decrease. This however, is only a general tendency. Other factors such as previous experience with French in high school, and particularly their speaking ability influence the overall results. These tables, therefore suggest further observations.

Most students who had previous French in high school and did not obtain the necessary score to enter second year French are found in the sixtieth percentile or below. Most of the students who placed in the sixtieth percentile or below and did not have French in high school needed additional weeks to complete the program. Furthermore, most of the drop-outs come from this group of students. The student who ranked in the seventy-fifth percentile and dropped out was actually dismissed from The University. The next two students (70th and 65th percentile respectively) were discouraged through the lengthy Part I of the program where they were deprived of meaning. The one student in the summer session who ranked in the 90th percentile dropped out because it conflicted with his work. Thus there is a relationship between the students without previous French and ranking in the lower aptitude group and the tendency to drop-out from the course, or needing more time than the regular course allows. If he has had previous work in French, he will need to work as hard as the others and cannot expect to get by on his previous knowledge.

There is a relationship between aptitude and the number of hours spent by the individual student. An accurate number of hours spent in studying cannot be established with accuracy for the students during the academic year. The summer session, however, does permit a compilation which comes close to the actual time needed. The following chart presents the relationship between aptitude, total number of hours, and results obtained by those students in the summer session who had no previous French.

aptitude percentile	number of hours
95	320
60	320
50	360
45	400

The student arrived at the number of hours by adding the number of hours he spends in the language laboratory, the hours he spends daily at home and the hours spent over the weekend. In their home preparation, the students reviewed orally the exercises printed in the Supplement, wrote out a number of exercises for which the answers were given in his workbook, and did the stories assigned for reading practice.

These students spent from 35 to 50 hours a week for an eight to nine week period. A total of from 300 to 400 hours are needed for the completion of the Program for the serious student between 20 and 25 years of age. As expected, the number of hours tends to increase as the aptitude of the individual decreases.

Speaking French being the primary objective of the Program the relationship between aptitude and the results in this skill is of special interest. The following chart illustrates the correlation between aptitude and the results in speech.

MLAT percentile	SPEAKING percentiles Academic yr.	Summer session
99-70	97	--
65-40	90	94
35-10	88	94

While there is some correlation between aptitude and achievements in speaking for the students during the academic year, there seems to be none for the students in the summer session. The number of students, however, whose results are available during the summer session is too small to formulate definite conclusions.

The MLA speaking examination tests the students speech in three major areas:

1. Mastery of sound production through mimicking an utterance and through reading a passage. Each scoring point represents the accurate reproduction of a given sound as it occurs in the stream of sounds of that utterance.

2. Mastery of elementary grammatical patterns through answering questions.

3. Ability to produce connected speech through extemporaneous talks for which pictures served as a stimulus.

If the scores in these three areas are compared with the student's aptitude no significant correlation can be established. It must be said, though, that at this stage the student's speech consists of elementary sentences only. If the vocabulary is known to them they can speak with almost equal correctness. At a later stage of language learning, when greater emphasis is given to extemporaneous speaking, it is likely that a more significant relationship will be found betwwen aptitude and achievements.

The following chart compares the student's foreign language aptitude as measured by MLAT with the results achieved in listening and reading.

MLAT	Listening	Reading
99-70	68	42
65-40	37	32
35-10	26	23

There is a positive and significant relationship between foreign language aptitude and the results in listening comprehension and reading. The student with the lower foreign language aptitude rating, even though this group includes the students with previous high school French experience, tends to understand and read the foreign language less well.

Language consists of more than the basic speech skills. Both listening comprehension and reading "comprehension" introduce other elements of language aptitude, aptitudes which the student is likely to have or not to have when he begins his foreign language study. A comparison of the students' foreign language aptitude and his language aptitude in his native tongue as revealed by the English COOP test with the results achieved in listening and reading tends to support this hypothesis. The following chart presents the correlation of the results with the students' general linguistic aptitudes:

APTITUDE			RESULTS	
MLAT	Speed of Comp.	Voc.	Listening	Read
60 and above	78	78	73	45
60 and below	50	50	50	26

2

The division was made within the sixtieth percentile rank on the MLAT. Those students who ranged above the sixtieth percentile and those in the sixtieth percentile with a high ranking in the English COOP were averaged. The students who ranked below the sixtieth percentile and those in the sixtieth percentile but who had a low ranking on the English COOP were averaged together. The students in the summer session were not taken into consideration since information on the English COOP is missing for half of them. The small number of students in the summer session is too small to draw any conclusions based on their performance.

The results in listening comprehension and reading correlate positively and significantly with the combined ranking on the MLAT and the English COOP. The student who ranks high on the MLAT, that is above the 60 percentile, tends to rank high on the English COOP. He is the student who handles his native language easily. He seems to achieve good results in understanding and reading the foreign language. The student who ranks in the middle range on the MLAT, that is from 60 to 50 percentile may be gifted in his native language as reflected by the high scores on the English COOP, that is, he reads English well with a high degree of comprehension. Such a student likewise tends to achieve good results in understanding and reading the foreign language. The student, however, whose English COOP indicates poor language ability, even if his foreign language aptitude is average achieves poor results in understanding and reading the foreign language. Obviously the student with poor foreign language aptitude combined with low ability in his native tongue achieves poor results in language comprehension. If the low ability student has had previous experience in the foreign language he is likely to succeed better in aural comprehension than in reading through this particular audio-lingual program.

This correlation tends to support the hypothesis that listening comprehension and reading are functions of certain verbal abilities including the skill of interpreting from context. The gifted student has such an ability, a skill, which is less prevalent among the **poorer students**.

The objectives of the ALLP French Program were limited to teaching the student to master the sounds and the basic patterns of the language within a very restricted vocabulary. It did not teach reading and did not attempt to train the student in aural comprehension in the extended sense of the word, namely in interpreting speech from context. In a revised program which explicitly attempts to train the student in the skills of interpreting from context, the question should be investigated whether the low aptitude student, if given enough time, can equal or at least significantly improve in aural comprehension and reading.

9. Correlation between Pensacola Z Scale and Results.

Trial use of the Program with Secondary Teachers of French at The University of Florida during the summer of 1963 demonstrated a relationship between the Pensacola Z Scale and the results, particularly in their speech improvement.

Learning a foreign language consists essentially of replacing old habits with new ones. A relationship between flexibility and rigidity in the student's personality might have a major influence in his acquiring the new language habits. At the institute at The University of Florida it was noticed that the rigid personality who had lived in the south maintained his pronounced southern accent, while the more flexible person, who had lived in the same area, could speak either southern or mid-western English at will.

The Pensacola Z Scale test was administered to the students enrolled in the Program during the academic year in order to see if a correlation existed between the students personal autonomy and the results.

This test is a 66 item questionnaire in forced -choice form. Each item consists of two statements, between which the subject must choose, even though neither statement really applies. The items of the Z Scale are all designed to get at one facet or another of "personal autonomy" or self - reliance. For example, some of the items are pointed at self-confidence:

Item 3. (A) You are anxious.
(B) You are conceited.

In this item, the autonomous response is, "You are conceited."

The use of the word "conceited" with its anti-social overtones is deliberate. In all the items of the Z Scale the autonomous response requires the subject to say that he is a little "different". Other items are aimed at independence:

Item 20. (A) You are rebellious.
(B) You like discipline

Here, the autonomous response is, "You are rebellious."

A third group of items concerns sympathy, for example,

Item 50. (A) You have felt so sorry for someone you have cried.
(B) You have gotten so mad you cried.

The autonomous response is, "You have felt so sorry for someone you have cried".

And finally, there are items which are pointed at intellectual flexibility:

Item 60. (A) You are dogmatic.
(B) You are sloppy.

The autonomous or, better, the non-rigid self-description, is, "You are sloppy".

All items of the Z Scale fall into one or the other of these four clusters: self-confidence, independence, sympathy, or flexibility. The total score is simply the sum of the four cluster-scores and ranges, therefore, from 0 to 60.

The average college population scores about 35 on the scale. A score of below 30 indicates that the participant views himself as extremely flexible and is able to work well outside of the group. Scores of 31-35 indicate average autonomy while scores of above 35 would indicate an increasing degree of personality rigidity.

The study of the gains on the MLA test among the teachers of the Florida institute showed "a tendency toward lower gains in listening comprehension and speaking ability as the scores on the Z Scale increase."

The following chart summarizes the scores and the results of the MLA test during the academic year:

Z Scores	Speaking Test	Average results Total Score	Percent Drop Outs	Percent Late Finishers
20-30	83%	134	35	28
31-35	94%	160	28	14
36-47	91%	125	12	25

There is no correlation between the Z scores and either the students' ability to speak, their overall results, the percentage of drop-outs or those who finished late. There is no explanation for the trend of diminishing percentage of drop-outs as the Z scores increase. As students with higher Z scores were the ones with greater autonomy, they did find learning new habits quite difficult and, therefore, frustrating. They should include the greater percentage of drop-outs or the greater percentage of students who finish the course late. But neither holds true. The higher drop-out rate of the group with the lowest Z scores is rather due to the fact that 48 percent of the original enrollment belong to this (extremely flexible) group, while 24 percent in the last group (increasing personality rigidity.)

Learning a foreign language for the first time, and learning new pronunciation habits in a foreign language taught by the individual for a number of years, is also quite a different experience. None of the frustration that the teachers exhibited at the institute was evident with these college students, although their work was about as intensive. Furthermore, people 30 and over are likely to be more set in their ways than college students averaging 20 years of age. The fact that almost half of the students placed in the lowest Z scores, rather than in the middle, seems to support this theory.

VIII. Conclusion.

The first Trial Use of the ALLP Program during the academic year, 1963-64 and its use in an intensified summer session 1964, bears out the hope that programmed learning is feasible on the college level. The self-instructional nature of the program eventually will permit larger classes and reduction of staff time allocated to elementary language instruction.

The limited experience with two seventh grade students and particularly the results obtained-namely the acquisition of excellent speech habits-suggest that the Program might find further application in high school. But it will not be feasible without the supervision by a knowledgeable French teacher. The younger the student the more he needs to be able to demonstrate what he has learned. The social stimulation derived from such display performance provides the motivation needed for his daily work.

This study suggests the following observations about the results:

1. The Program seems to have considerably reduced the rate of student drop-outs.
2. Successful completion of the beginning foreign language course for a number of students with very low foreign language and linguistic aptitude might be attributed to the Program.
3. All students, even those with low aptitude were able to achieve high speaking performance. Their speech characteristics approximate those of the native Frenchman particularly among the more gifted students.
4. The achievements in listening comprehension and reading seem to be the result of several factors: retention of students with lower aptitude, stress of the informal language while the formal language was used for testing, and the need for improvements of the Program.
5. The results in writing were greatly improved during the summer session over the achievements during the academic year by practicing it moderately beginning with Part III of the Program. The results during the summer session slightly exceeded those obtained by the control sections, an improvement so much more significant since the students in the summer session had much lower language aptitude.
6. The Program found general acceptance among the students, as expressed in interviews and in the reduced drop-outs.
7. Programmed learning seems to make the learning of an oral skill much less aversive to students whose primary mode of learning is visual.
8. There is a positive relationship between the student's foreign language and linguistic aptitude and the results he will achieve. This relationship is most obvious in reading and listening comprehension and least significant in his speaking.
9. As the student's language aptitude decreases he is more likely to drop-out from the course if he has not had previous experience with French; likewise the number of hours required for the completion of the Program increases. In its present form the Program requires from 300 to 400 hours of study.
10. There seems to be no correlation between results and the student's personal autonomy as measured by the Pensacola Z Scale.
11. The improvements achieved in the summer session with a group of less gifted students are the results of a number of changes in procedure without basic changes in the Program

itself. Once proposed revisions are carried out still better results in the various skills might be achieved.

12. The reduction effected in Part I of the Program for the summer session had no ill effects on the students' oral achievements. The results support the belief that discrimination training in the original Program was greatly overemphasized.

The experiment with a number of adults indicates that programmed learning is applicable in situations where the student cannot attend a regularly scheduled class. The Program is feasible in cases where French must be acquired within a few weeks for a proposed business trip to a French speaking country. The adult student, however, is not likely to complete the Program if left to himself. A weekly contact with the instructor to demonstrate his achievements, and to get needed social stimulation seems to be necessary to maintain motivation.

This first trial use pointed out the areas in which the Program needs to be improved. Extensive revisions are needed in Part I (pronunciation) to reduce the time needed for acquiring the new pronunciation habits, to increase the efficiencies of the exercise, and to eliminate some of the speech deficiencies still prevalent in the speech of the students. A number of improvements need to be made in Part III (morphemic structures) to improve the effectiveness of the exercises drilling the verb patterns and to better satisfy the students' questions about French structure. Revisions in the dialogues should be made to improve oral comprehension of materials containing unknown vocabulary items. Further revisions of the program should aim at improving the reading and writing skills.

The revisions and additions suggested on the basis of personal observations and on the basis of the results will alter primarily the character of Part I of the original ALLP Program and affect one of the basic concepts according to which the original program was constructed, namely the total separation of the various elements constituting the ability to speak. A more integrated program will result from these revisions. The changes and additions suggested here, however, do not alter or compromise the basic principles of programming.

The administration of the Program needs further attention. A number of safeguards must be introduced and a degree of discipline must be maintained to offset tendencies of irresponsibility on part of the student. Techniques of interpersonal communication must be further developed as an addition to learning exlusively by machine. More frequent and better testing needs to be implemented to assure that the student progresses only after having mastered a body of material. Very few college students or adults are able to acquire the desired knowledge on a totally self-instructional basis. As these techniques improve, better results will be obtained and the time required to administer the program will be reduced thus increasing staff productivity.

The present study also revealed future adminstrative problems arising from the fact that every student needs a different time span to complete the task. The low-aptitude student without previous experience in French cannot complete the Program in its present form during the assigned two semester time span, or during the eight week intensive summer session. The revisions will therefore shorten the Program wherever possible. The gifted and well motivated student may then be able to complete it in one semester while the less gifted one needs considerably more time. What to do with the student who finishes the Program in less than the two semester time span becomes the problem which needs further investigation.

APPENDIX A

The Quizzes

QUIZ AT THE CONCLUSION OF PART I (Pronunciation)

Repeat the following utterances:

(Note for correction: The sound underlined is the one being tested in each utterance).

1. Le chapeau est beau. /o/
2. Le jeune homme part /o/ Check the English tendency to nasalize.
3. Il faut écouter. /e/
4. Il oublie la dame /u/
5. Maman est blonde. /õ/
6. Vous vendez la robe. /ã/
7. Elle est importante. /ẽ/
8. Tu apportes un verre. /ü/
9. Je suis grande. /ẅi/
10. Il est six heures. /ö/
11. Nous allons chez eux. /ö/
12. Elle lave la vaisselle. /l/
13. Il parle trop. /r/
14. C'est ta chemise. /t/
15. C'est ma bicyclette. /t/
16. Un kilo de pain. /k/
17. Il a une pomme. /p/
18. L'enfant joue. /ʒ/
19. L'enfant mange. /ʒ/
20. C'est une jupe. /p/

Read the following utterances: (they are given in phonemic transcription).

Bonjour Marie. /r/
Comment ca va? /ã/
Merci. Qu'est-ce que tu fais? /ü/
Je déjeune. /ö/
Comment vont les enfants? /õ/
Ils sont au magasin /a/
Ils achètent des légumes linking in ils achètent
C'est impossible. /ẽ/
C'est la soeur de Marie /ö/

QUIZ

CONCLUSION OF PART I (Pronunciation) (student sheet)

Student Test Paper

Instructions: Section 1.

Repeat the following utterances. Each utterance will be heard once. Repeat it during the pause that follows. Repeat it as accurately as possible, including the intonation.

Section 2:

Read the following paragraph line by line. The paragraph is written in phonemic transcription, that is the same symbols as used in the program. You are given a short time to read it silently. Begin to read it aloud when told to do so.

/bõʒur mari/.
/komã sa va/?
/mersi. keskə tü fe/?
/ʒə deʒön/.
/komã võ le z-ãfã/?
/il sõ t-o magazẽ/.
/il z-aʃet de legüm/.
/se t-ẽposibl/.
/se la sör də mari/.

This is the end of the test.

QUIZ AFTER VOCABULARY

Give the French equivalent orally:

Tell her to eat dinner at home.
Tell her to stay at school.
Tell him to eat bread.
Tell him to buy clothes at the store
Tell him to buy meat at the butcher shop.
The salesman is selling clothes in the store.
Bread is found in the bakery.
Jane is leaving
Mother is leaving the bread on the table.
Henry is wearing shoes.
Mother is bringing eggs.
My son is looking for the shoes.
Tell him to fix the car.
The soup tastes bad.
The shirt seems dirty.
The engineer is working at the factory.
The worker is successful.
The child is sleeping.

QUIZ AFTER FRAME 800

1. Formez la question pour les phrases suivantes:

1. Maman prépare la soupe.
2. Il achète des livres.
3. Elle vend du pain au monsieur.

II. The following sentences are the answers. What is the question.

4. Je finis mes devoirs.
5. J'écris au professeur.
6. Je rends le journal.
7. J'entends les enfants.
8. Je sers du vin.
9. J'apporte mes livres.

III. Answer the following questions.

10. Qu'est-ce que vous levez?
11. Qu'est-ce que vous mangez?
12. Est-ce que vous partez?
13. Qu'est-ce que vous finissez?
14. Est-ce que vous grossissez?
15. A qui est-ce que vous parlez?
16. Est-ce que vous êtes étudiant?
17. Est-ce que vous habitez Akron?
18. Est-ce que vous êtes vieux?
19. Est-ce que vous êtes à l'université?
20. Est-ce que vous avez des livres?
21. Est-ce que vous travaillez?
22. Qu'est-ce que vous aimez?

TEST AFTER 900

I. Change the following sentences into the plural. Example:
S.: tu vendsdes legumes
R.: vous vendez des legumes

Read each stimulus aloud into the microphone. Then try the answer once or twice for yourself, then give the answer in a clear voice.

1. tu finis la leçon
2. il met la table
3. elle rougit
4. j'attends l'épicier
5. il choisit des pantalons
6. je lis le journal
7. elle sert du thé
8. je vais au restaurant
9. elle devient grosse
10. je veux du pain
11. tu peut réussir
12. il veut étudier
13 il peut venir
14. j'achète du pain
15. tu amènes Jean
16. je jette le journal
17. tu bois du vin
18. il boit de l'eau
19. j'apprends le français
20. il prend la robe

II. Answer the following questions. Read the question aloud. Try to answer it once or twice for yourself, then answer it in a clear voice.

21. Qu'est-ce que vous lisez?
22. Qu'est-ce que vous choisissez?
23. Qu'est-ce que vous servez?
24. Où est-ce que vous allez?
25. Qu'est-ce que vous voulez?
26. Qu'est-ce que vous pouvez faire?
27. Qu'est-ce que vous achetez?
28. Qu'est-ce que vous apprenez?
29. Qu'est-ce que vous prenez?
30. Qu'est-ce que vous amenez?

TEST AFTER 953

I. Change the following sentences into the passé composé:

1. elle vend le livre
2. vous rendez la bicyclette
3. Nous servons de la soupe
4. j'écris une lettre
5. vous choisissez la robe
6. elle tient la bicyclette
7. nous allons en ville
8. Il descend
9. je sors
10. il n'entre pas
11. je lis un livre
12. elle reçoit une lettre

II. Answer the questions. They are taken from the conversations:

13. où est-ce que vous êtes né?
14. est-ce que vous êtes allé à Paris?
15. est-ce que vous avez mangé?
16. qu'est-ce que vous avez pris?
17. où est-ce que vous avez voyagé?
18. est-ce que vous êtes allé en France?
19. est-ce que vous avez trouvé des souvenirs?
20. qu'est-ce que vous avez acheté?
21. où est-ce qu'on a fabriqué ses souvenirs?
22. où est-ce qu'on a fabriqué les mocassins?

TEST AFTER 1005

I. Give the French equivalent:

1. They drink wine.
2. I like cheese.
3. I don't eat bread.
4. They like coffee.
5. He drank my coffee.
6. I like his shirt.
7. I like her hat.
8. I like his daughter.
9. I like his children.
10. John is our son.

II. Substitute the pronoun y in the following sentences:

11. le boulanger vend du pain au magasin
12. tu prends de la bière au café
13. je ne reste pas au bureau
14. elle n'achète pas de robe au magasin
15. nous sommes allé au magasin
16. elle est arrivée à l'université
17. je n'ai pas diné au restaurant
18. il faut aller au bureau
19. nous allons attendre au magasin

III. Answer the questions: Use a sentence in your answers:

20. est-ce que vos études sont intéressants?
21. qu'est-ce que vous avez choisi?
22. est-ce que vous avez préparé vos examens?
23. à quelle heure est-ce que vous allez en classe?
24. à quelle heure est-ce que vous rentrez?
25. est-ce que vous aimez les pommes vertes?
26. qu'est-ce que vous achetez au magasin?
27. est-ce que vous avez de l'argent? (answer no)

TEST AFTER 1050

I. Substitute the appropriate pronoun in the following sentences.

1. je ne vends pas de fromage
2. elle n'a pas de vêtements
3. tu as vendu du cidre?
4. tu vas écrire des lettres
5. tu ne dois pas boire de l'eau
6. son père n'achète pas la maison
7. elle a attendu le jeune homme
8. je n'ai pas étudié mes leçons
9. il faut laver les enfants
10. je ne vais pas lire le journal
11. écoutez le professeur
12. ne quittez pas la ville

II. Answer using the appropriate pronoun.

13. qui vend du pain?
14. qui a acheté la maison?
15. où est-ce qu'on trouve du pain?
16. où est-ce qu'on vend ses vetements?
17. qui a lu le journal?
18. qui doit étudier le français?
19. qui va conduire l'auto?
20. quand est-ce que vous allez prendre le train?

III. Conversations: Answer:

21. est-ce que vous étudiez le français?
22. est-ce que vous voulez devenir professeur?
23. où est-ce que vous voulez aller?
24. est-ce que vous connaissez des Français?
25. est-ce que vous êtes allé en France?
26. vous avez acheté des souvenirs?
27. où est-ce que vous avez vu des cowboys?
28. où est-ce que vous avez vu le film francais?
29. où est-ce que vous avez trouvé ce livre?
30. où est-ce que vous avez appris le français?

TEST AFTER 1093

I. Substitute the appropriate pronoun in the following sentences:

1. elle a mangé beaucoup de légumes
2. nous allons offrir plusieurs livres
3. maman veut un kilo de légumes
4. j'écris à mon ami
5. le professour a répondu aux enfants
6. tu n'aspas répondu au professeur?
7. je veux parler à maman
8. elle ne doit pas répondre au monsieur
9. on peut parler au garçon?
10. vous n'avez pas écrit à maman?

II. Answer using the appropriate pronoun:

11. qui a parlé au professeur?
12. qui va écrire la lettre?
13. qui va écrire à maman?
14. où est-ce que vous avez trouvé du pain?
15. qu'est-ce que vous avez acheté aux enfants?
16. qu'est-ce que vous avez offert à la jeune fille?
17. qui doit répondre au professeur?
18. est-ce que Jean doit vous parler?
19. qu'est-ce que le marchand vous montre?
20. qu'est-ce que papa vous a donné?

III. Answer the questions: Let's assume you want to go to France.

21. pourquoi est-ce que vous voulez voir le professeur?
22. où est-ce que vous voulez aller?
23. qu'est-ce que vous voulez faire en France?
24. est-ce que vous avez de l'argent?
25. quel travaille est-ce que vous pouvez faire?
26. qui peut vous aider?

TEST AFTER 1150

I. Change the following verbs into the passe composé (past tense):

1. il s'excuse
2. nous nous trompons
3. il va s'asseoit
4. je m'habille
5. elle ne se lève pas
6. les enfants se trompent
7. maman habille les enfants
8. papa sort
9. papa se couche
10. maman lave les enfants
11. maman se lave
12. je pars
13. les enfants descendent.

II. Answer the following questions:

14. quand est-ce que vous vous couchez?
15. quand est-ce que vous vous êtes levé?
16. qui s'est excusé?
17. qu'est-ce que maman a lavé?
18. qui s'est trompé?
19. qu'est-ce que vous avez vu?
20. quand est-ce que vous êtes parti?
21. qu'est-ce que vous fumerez?
22. qui répondra au professeur?

III. Answer:

23. est-ce que vous avez froid?
24. qu'est-ce que vous buvez quand il fait froid?
25. pourquoi est-ce que vous buvez?
26. est-ce que vous avez le nez rouge?
27. est-ce que vous allez a la boulangerie?
28. qui y va?
29. qu'est-ce qu'on achète à la boulangerie?
30. est-ce que vous allez a l'école le jeudi?
31. est-ce que vous allez y aller le dimanche?

TEST AFTER 1205

I. Change into the future:

1. elle nous sert
2. je sors
3. tu pars?
4. elle a offert la robe
5. il a souffert
6. vous finissez
7. il a réussi
8. je n'ai pas réussi
9. vous buvez?
10. elle vient
11. les enfants reviennent

II. Answer:

12. quand est-ce que vous reviendrez?
13. quand est-ce qu'elle s'est couchée?
14. qu'est-ce que vous ferez se soir?
15. qu'est-ce que vous ferez au café?
16. qu'est-ce que vous ferez à l'université?
17. vous étudiez beaucoup?
18. vous avez bien travaillé?
19. est-ce que vous avez déjà mangé?
20. comment est-ce que les enfants ont répondu?
21. qui vous aime toujours?

Answer the following questions. Let's assume that you are on the train for New York. You are going there to look for a job.

22. où est-ce que vous descendez?
23. à quelle heure est-ce que vous devez arriver?
24. d'où venez-vous?
25. qu'est-ce que vous allez faire à New York?
26. est-ce qu'on vous attend à la gare?
27. vous avez des amis a New York?
28. est-ce que vous prendrez l'autobus?
29. pourquoi?
30. est-ce que le train arrivera à l'heure?

TEST AFTER 1248

I. Answer using a negative word: never, nobody, nothing, nowhere.

1. est-ce que vous allez en ville?
2. est-ce que vous répondrez à Jean?
3. qu'est-ce que vous faites?
4. qu'est-ce que vous avez fait?
5. qui est arrivé?
6. est-ce qu'elle a trouvé son chapeau?
7. est-ce qu'elle rougit encore?
8. qu'est-ce que vous avez vu?
9. qu'est-ce que vous avez mangé?

II. Give definitions for the following items.

10. qu'est-ce qu'une épicière?
11. qu'est-ce qu'un boulanger?
12. qu'est-ce qu'une boucherie?
13. qu'est-ce qu'une boulangère?

III. Answer the questions: Let's assume you went to New York and spent all the money you had.

14. où est-ce que vous êtes allé?
15. vous n'y êtes pas resté?
16. la ville ne vous a pas plu?
17. pourquoi est-ce que vous n'y êtes pas resté?
18. qu'est-ce que vous avez fait?
19. où est-ce que vous avez mangé?
20. est-ce qu'on mange bien à New York?

QUIZ AFTER FRAME 1306

The exam is presented in the normal French spelling. You are expected to be able to read it.

Change the following sentences into the imparfait:

1. Ils ont puni l'enfant.
2. Je vous ai attendu.
3. Nous sommesen classe.
4. Vous viendrez?

Answer the questions using either the passé composé or the imparfait as required by the question. Let's also include the future.

5. Qu'est-ce que vous avez lu?
6. Qui jouait dans la rue?
7. Quand est-ce qu'elle viendra?
8. Qu'est-ce que vous lisiez?
9. Qu'est-ce que vous ferez?
10. Quand est-ce que vous êtes partis?

Change the following utterances into questions. Formulate your question so that the underlined word will be the answer.

11. On parlait de ce restaurant.
12. Je vais en ville.
13. Je partirai ce soir.
14. Je me repose au bureau.
15. Je la vois dans la rue.
16. J'ai attendu à la maison.
17. Je suis parti hier.
18. J'ai vendu mon auto.
19. J'ai parlé à ma soeur.
20. Il conduit mal.

Answer the following questions.

21. Quand est-ce que vous êtes allé au cinéma?
22. Est-ce que vous y êtes allé avec un ami?
23. Est-ce qu'il était prêt quand vous êtes venu?
24. Qu'est-ce que vous portiez?
25. Qu'est-ce que vous aves fait après le cinéma?
26. Qu'est-ce qu'on dit quand on veut fumer?
27. Qu'est-ce qu'on répond?
28. Qu'est-ce qu'on fait alors?

QUIZ AFTER FRAME 1345

Combine the sentences: Add the first stimulus given in the infinitive to the next sentence which is started.

1. Venir demain.
   Je crois ....
2. Partir hier.
   Je crois ....
3. travailler maintenant.
   Je crois ....
4. partir demain.
   Il faut ....
5. partir hier.
   Je sais ....
6. grossir.
   Il faut ....
7. sortir.
   Papa veut ....

Combine the two sentences into one.

8. Maman punit l'enfant. Papa le veut.
9. Je lis le journal. Il le faut.
10. Je vais en ville. Il le faut.
11. Nous réussissons. Je le crois.
12. Je finis ce travail. Papa le veut.
13. Il sait conduire. Il le faut.
14. Jean va à l'école. Jean le veut.

Answer the questions:

15. Aller à l'école.
    Qu'est-ce qu'il veut faire?
16. Finir les devoirs.
    Qu'est-ce que vous voulez que je fasse?
17. Boire du vin.
    Qu'est-ce que vous voulez faire?
18. Apprendre les lecons.
    Qu'est-ce que papa veut que je fasse?
19. Mettre des chaussures.
    Qu'est-ce qu'il veut faire?
20. Raccommoder la robe.
    Qu'est-ce qu'elle doit faire?

Answer the following questions.

21. Vous aimez manger des oeufs?
22. Est-ce que vous savez faire la cuisine?
23. Qu'est-ce que vous savez faire?
24. Où est-ce que vous êtes allé quand vous étiez jeune?
25. Quand est-ce que le mari fait la cuisine?
26. Est-ce que votre mere va venir faire la cuisine?
27. Pourquoi est-ce que le mari ne veut pas faire la cuisine?
28. Qu'est-ce que vous avez appris a l'université?

TEST AFTER FRAME 1362

Read the following numbers:

81, 35, 57, 21, 95, 77, 91

Quelle heure est-il? (answer using the following times:)

11:30, 7:45, 3:15, 6:10, 9:20, 6:55, 3;35

Give French equivalents:

I ask you to stay.
I want her to work.
I want him to wait.
I want him to learn his lesson.

Repondez:

Qu'est-ce que vous préférez faire?
Qu'est-ce que vous êtes en train de faire?
Qu'est-ce que vous voulez faire?
Qu'est-ce que vous commencez à faire?
Qu'est-ce que vous venez de faire?
Qu'est-ce que vous pensez faire?
Qu'est-ce que vous avez oublié de faire?
Qu'est-ce que vous apprenez à faire?

Comment réussit-on?
Comment trouve-t-on?
Comment gagne-t-on de l'argent?

Qu'est-ce que vous savez faire?
Est-ce que vous savez faire la cuisine?
Qu'est-ce que vous mangez aujourd'hui?
Quand est-ce que vous cuisinez?

Qui peut vous préter de l'argent?
Pourquoi est-ce que vous en avez besoin?
Qu'est-ce qu'il faut faire quand on n'a pas d'argent?
Est-ce qu'on gagne en jouant?
Comment est-ce qu'on gagne de l'argent?

QUIZ AFTER THE FIRST TEN CONVERSATIONS.

Répondez aux questions suivantes:

Vous savez où est l'université?
A quelle heure est-ce que vous devez y être?
Comment vous appelez-vous?
Qu'est-ce que vous faites à Paris?
Où est-ce que vous habitez?
Qu'est-ce que vous faites a l'université?
Où est-ce que vous mangez vos repas?
Combien coûte un bon repas?
Qu'est-ce qu'on sert?
Qu'est-ce qui est important pour un repas français?
Quels professeurs avez-vous?
Comment ce professeur est-il physiquement?
Qu'est-ce qu'il fait en classe?

D'ou êtes-vous?
Est-ce que vous avez réussi a l'universite?
A quelle heure est-ce que vous avez un cours?
Qu'est-ce que vous faites ce soir?

Demandez à la jeune fille où est l'université.
Demandez-lui à quelle heure elle doit y être?
Demandez-lui si elle veut prendre un verre avec vous.
Demandez-lui ce qu'elle veut prendre.
Demandez-lui ce qu'elle fait à Paris.
Demandez-lui où est-ce que vous la retrouverez.
Demandez-lui si ellepourrait venir chez vous.

Demandez-lui si elle veut vous donner son adresse.
Dites à Pierre de vous apporter du vin rouge.
Dites à Pierre de vous apporter du café.
Demandez à votre ami ce qu'il a fait cet été.
Demandez-lui si elle sait conduire.
Demandez-lui si vous pouvez la voir ce soir.

QUIZ AFTER CONVERSATION 22.

Dites-lui de se réveiller.
Dites-lui de se lever.
Invitez Michèle à sortir avec vous.
Répondez-lui que non.
Demandez-lui si elle sera libre dimanche soir.
Demandez-lui si elle vous prêtera de l'argent.
Défendez-lui d'entrer ici.
Défendez-lui de prendre votre électrophone.
Défendez-lui de fumer dans votre chambre.
Demandez-lui si elle a de l'argent.

Le mari cherche sa pipe. Il demande à sa femme: (répondez a ces questions)

Tu n'aspas aperçu ma pipe quelque part?
Tu ne l'as pas rangée par hasard?

Où est-ce que le mari est allé ce matin?
Où est-ce qu'il a laissé sa pipe?
Où est-ce qu'il a pu l'emmener?
Où est'ce qu'il l'a trouvée?

UNE PARTIE DE CARTES (CONV. 17)

Qui a joué aux cartes?
Qui a gagné?
Qu'est-ce que Jules a fait?
Qu'est-ce que sa femme veut savoir?
Qu'est-ce que le mari pourrait faire?

CONV. 21

Qu'est-ce que le jeune homme n'a pas encore fait?
Pourquoi est-ce qu'il est sûr d'avoir envoyé le chèque?
Où est-ce qu'il trouve le chèque?

TARTARIN de TARASCON

Name____________

Indicate whether the following statements are true (T) or false (F).

Chapitre 1.

____ 1. Il y avait deux lions dans Tarascon, le lion dans la cage et un lion dans la ville.

____ 2. Tartarin a voyagé dans beaucoup de pays différents. Il a rapporté des souvenirs de ces voyages.

____ 3. Il y avait une panique parmi les spectateurs quand le lion a poussé un rugissement formidable.

Chapitre 2.

____ 4. Tartarin parlait beaucoup, mais c'était tout.

____ 5. Tartarin-Sancho et Tartarin-Quichotte sont les compagnons de Tartarin de Tarascon.

____ 6. Tartarin a toujours voulu partir pour l'Afrique.

____ 7. Tartarin a promis d'envoyer des peaux de lion.

Chapitre 3.

____ 8. La chéchia est le chapeau que Tartarin porte.

____ 9. Tartarin a souffert le mal de mer sur le bâteau. Il est bien malade.

____10. Le bâteau de Tartarin a sombré dans la mer.

____11. La troupe de chasseurs avait tué plusieurs lions.

Chapitre 4.

____12. Pendant la nuit Tartarin est arrivé dans un immense désert.

____13. Tartarin attend la femelle du lion pendant la nuit.

____14. Le matin la femme de l'aubergiste est arrivée et lui a donné des coups de parapluie.

____15. Tartarin a pris la diligence pour arriver dans le Sahara.

Chapitre 5.

____16. Tartarin a acheté un chameau.

____17. Le "prince" a pris le portefeuille et l'argent de Tartarin et est parti.

Chapitre 6.

____18. Tartarin a tué un lion.

____19. Tartarin est revenu à Alger par le train.

____20. Le chameau a toujours accompagné Tartarin.

____21. Tartarin est arrivé à Tarascon avec son chameau.

____22. Tartarin est arrivé à Tarascon en triomphe.

APPENDIX B

Program - 1st semester - Final Exam

I. PRONUNCIATION

1. Tu es dans la rue /ü/
2. Dans ma bouche /u/
3. L'eau est chaude /o/
4. C'est mon magasin /a/
5. Elle veut leurs pommes /o/
6. C'est maintenant /ẽ/
/ã/
7. Ils ont des enfants /o/
8. Je suis à Paris /w/
9. Il faut dormir /r/
10. Elle veulent /l/
11. Qui ne peut pas /k/
/p/
12. C'est toi (initial) /t/
13. Ils vous battent /t/
14. Ils descendent (final)/d/

II. MANIPULATION

15. Tu manges des oeufs - vous
16. Je choisis des légumes - vous
17. Il vend des légumes - nous
18. Vous partez - tu
19. Vous finissez les devoirs - je
20. Vous buvez du café - je
21. il apprend le français - vous
22. Nous achetons des oeufs -- elle
23. Tu veux des oeufs -- nous
24. Elle va à Paris - nous

Adding il faut - change to infinitive:

25. Tu parles
26. Nous partons
27. Elle vend des oeufs
28. Tu écris
29. Vous dormez
30. Nous finissons les devoirs

III. CONVERSATION: ANSWER QUESTIONS

31. Qu'est-ce que vous étudiez
32. Qu'est-ce que vous allez devenir
33. Qu'est-ce qu'il faut faire pour les examens
34. Est-ce que vos examens sont difficiles
35. Où est-ce que vous étudiez
36. Où est-ce que vous habitez
37. Vous avez un appartement
38. Où est-ce que vous déjeunez
39. Qu'est-ce que vous mangez
40. Qu'est-ce que vous buvez

APPENDIX C

Report of Individual Oral Examinations

by

Professor Frederick D. Eddy

May 14, 1964

TO: Professors Lepke & Mueller

FROM: Frederick D. Eddy, Professor of French, Georgetown University, special examiner for Beginning French Programmed Learning

SUBJECT: Report of individual oral examinations given today

As agreed with Professor Mueller, each student was interviewed for about 12 minutes each. (I had originally estimated 8 or 9 minutes, but that proved to be too short and we ran about an hour over the scheduled exam period.) Between 8:10 a.m. and 12:50 p.m. 24 students were examined.

I. The interview in French

A typical interview had in it these kinds of questions from me.

Vous habitez Akron?

Combien de personnes y a-t-il dans votre famille?

Votre frère le plus âgé (grand), quel âge a-t-il?

Comment arrivez-vous à l'université tous les jours; vous venez en voiture (automobile)?

Qui conduit la voiture?

C'est votre deuxième année à l'université?

Quelle est votre spécialité?

C'est aujourd'hui jeudi, n'est-ce pas? Et c'était hier mercredi. Dites-moi ce que vous avez fait hier, mercredi.

Qu'est-ce que vous allez faire ce weekend (cet été)?

At the end of the interview in French, I told the student to ask me questions: "Maintenant vous allez me poser des questions, personnelles, professionnelles, tout ce que vous voulez." The student's questions were usually like the following, and in general represented the best over-all performance of the group:

Comment vous appelez-vous?

Vous ètes professeur? A quelle université?

Où habitez-vous?

Immediately following each interview, I graded the student in five categories: Pronunciation, Fluency, Control of grammar, Control of vocabulary, Comprehension of my questions and remarks.

No difference was made in the oral examination or in the grading according to how much of the material of the course the student had covered. Thus all of the students who are behind the main body of the class should have rather low grades.

The grading scale used is as follows. My rating was based on the performance to be reasonable expected from a college student after one academic year in a well-taught class meeting 3 hours a week supported by 5 half-hour lab sessions a week. To be more specific, I had in mind a college or university--like The University of Akron--where most of the students are not highly motivated toward the study of foreign languages. The rating would have resulted in somewhat lower grades if I had compared the Akron students with end-of-first-year students in such centers as the Georgetown University School of Foreign Service or Institute of Languages and Linguistics. The latter are highly self-selected even before applying to us; we do a further screening of applicants; all have foreign-language mastery for communication either as their principal career goal or as a very high-priority tool. It should be noted here, however, that among the 24 students examined at Akron, I found a few, including one adult, who, having taken this course, were interested in going on to a French major.

A - excellent (so very good that a native speaker would not be inconvenienced or distracted; easy, fluent communication)

B - good

C - fair

D - poor

F - failing (communication badly impaired or lacking)

The rating of Pronunciation can be interpreted more precisely as follows. (The phrase "deviation from phonemes" means "deviation from near-native control of both suprasegmental and segmental phonemes." The phrase "mismanagement of allophones" means "mismanagement of allophonic detail," which is normally the source of a "foreign accent" in otherwise fluent speakers.)

A - Very few deviations from phonemes, and very little mismanagement of allophones (Note that no student was rated A in pronunciation.)

B - Occasional deviations from phonemes and mismanagement of allophones

C - Frequent deviations from phonemes and mismanagement of allophones

D - Very frequent deviations from phonemes and mismanagement of allophones

F - Gross deviations from phonemes and mismanagement of allophones, or silence

The rating of Control of Grammar can be interpreted more precisely as follows. ("Control of grammar" means control of those basic structure points normally taught in a first-year college course as described just above, including, for verbs, the use of present, past, and future tense.)

A - Accurate and complete control (Note that no student was rated A in grammar.)

B - Control above average

C - Control average in scope and accuracy

D - Control below average in scope and accuracy

F - Very incomplete and/or very inaccurate control

II. The Interview in English

In the last minute or two with each student, I got and summarized in writing his response to this question:

"A friend of yours is taking French next year. How would you rate this course for him, as compared with the standard course in beginning French given on this campus? Please select one of the following." (I recorded his selection by number in the column headed "opinion"):

1. very high
2. high
3. not sure
4. low
5. very low

Note that some students gave two ratings of the course, e.g., one for prospective majors in French, one for non-majors.

Next to each rating I summarized the subject's comment in answer to my last question, "Please explain your rating in a few words."

In an oral exam like this one, so unusual--alas!--one American campuses that the students are for the most part very nervous, even scared, it is not easy to judge student reaction to the course and the materials. However, I did get the over-all impression that these students were interested and challenged by the materials, the methods, and the teaching personnel. Most important, perhaps, is that they seemed to have a healthy respect--sometimes admiring, sometimes grudging--for the amount and quality of work required to complete the course as compared with the standard course in beginning French. That their opinions were on the whole favorable is shown by a glance at the column headed "opinion." That their opinions were reached after taking some serious and realistic thought seems quite clear after a careful reading of the last column, "reason for opinion."

III. Comments on the interview in French

A. Procedure

To the best of my ability, I gave the same kind of exam to all students, and rated them all on the same absolute scale. Thus, for whatever they are worth, all ratings are comparable, i.e., comparing one student's performance with another's, or comparing a given student's control of vocabulary, for example, with his control of grammar or his pronunciation.

B. Effect on the student

The kind of exam just described, while giving easily read results, is hard on the poorly or partially prepared student, and on the one who is very nervous or unlucky.

C. Recommendations for later examinations

It *might* be advisable, when doing this again, for the examiner to be supplied with a fairly detailed table of contents of the course, showing what structure and what vocabulary has been presented, frame by frame, in sequence. Thus he could avoid getting a student who is lagging behind the group involved in structure or vocabulary he has not yet practiced. This would ease the strain on many students.

On the other hand, it has two disadvantages:

(1) Personally I would not have had the time to thoroughly absorb such an outline to the point of usefulness.

(2) The laggards would be favored by such a procedure,

with the probable results that ratings would not be comparable as between one student and another.

IV. Reading

A page of reading materials consisting of a dialogue and a passage taken from Le Petit Prince was sent to Akron prior to my interviews. Each student was asked to read it aloud and record his reading on tapes after having had an opportunity to prepare it.

I found this tape fascinating. What it reveals, combined with the observations made in the individual oral exams, points the way toward the substantial contribution that the Program is making toward teaching good French speech habits. My observations on the tape appear below numbered. They go, more or less, from the general to the specific. No individual ratings are given; my time is too limited.

1. The student is alone before the mike. His performance is, in general, noticeably superior to that of the oral exams. He is relaxed, fairly assured, in many cases quite effective.
2. This bears out one of my observations: the student, alone in the booth with the mike and his materials, is on very familiar ground. Face to face with me, a total stranger speaking French, he was advancing into unknown territory every step of the way.

3. His rendition of the page of French, dialogue and narrative, was effective in spite of his relative lack of practice, evidently, in reading. None had really excellent control of the relationship between spoken and written French.
4. But--here is the crucial point--all have something much more basic and much more important: the ability to produce a stream of speech whose characteristics are no longer Anglo-American, but more or less French, in some cases very French.
5. In all cases but one, I have the impression of listening to French read by a non-native, but only here and there is it evident that the student's own language is English. In other words, the student's native-language phonology is no longer dominant, and here is a very important step forward. The one exception was Student No. 16 (female)--that is, No. 16 in my report.
6. If I had time, I could report in detail on those elements of French phonology present and of English phonology absent that support my Observation 5 just above. It will have to suffice here to say that the entire range of segmental and suprasegmental phonemes would be treated, as well as quite a lot of allophonic detail. I regret that lack of time compels me to stop here.

V. Personal impressions

I have the feeling that these new materials and methods have had a satisfactory first trial, and that they are well worth the effort of further refinement and use.

I am glad to know that the revisions presently contemplated include much less time on sound discrimination at the outset. The students often used the phrase "boring at first."

I suspect that these lab materials and small-group class sessions every few days would profitably interact to reward the good students, stimulate the laggards to better effort, and generally move the entire group along toward better and more homogeneous results. After all, one does well what one has practiced. I had the feeling as the exam went on that these students had not practiced enough talking with people--which is quite a different thing from responding to a machine. (These observations are in no way intended to denigrate the use of the machine for drill in the habits required for easy interpersonal communication. We have a long way to go to arrive at the optimum use of the machine. The Mueller materials, and others, have set us well on that way, I think.)

I shall be very much interested to see how my exam grades correlate with significant factors such as number of frames covered by a student, his observed effort and its results day by day and in course exams, his previous background in French and/or in other foreign languages.

I am grateful for the opportunity to work in such a pleasant atmosphere with such dedicated professionals and such likeable students.

STUDENT NUMBER	PRONUNCIATION	FLUENCY	GRAMMAR	VOCABULARY	COMPREHENSION	OPINION	REASON FOR OPINION
1	B-	C+	B-	B	B+	1	You know something when you're through; all the time you have to know what came before.
2	D-	F	F	F	F	1 4	If he's majoring.. If he's not.. Time consuming. You don't enjoy it until the end, no benefits 1st semester.
3	C-	D	D	D+	D	1 5	If major.. / If not.. / It takes time and concentration.
4	B+	B	B-	B	A-	1 3	If French in high school.. If no French in high school.. I had some grammar to fall back on. I was bored with the tape recorder, but it was very helpful in thinking in French.
5	D	D-	F	D	F	1	I underrated the need for practice, lost a lot. Now I've changed. If you want conversation, it's very good, Well planned.
6	C-	C+	C	C+	B-	1 4	If not a French major.. If a French major.. Takes less time out of class. You can work as you like.
7	C-	D	C-	C	C	1 4	If you are not self-disciplined and if you want to speak If you are self-disciplined and want to read.

STUDENT NUMBER	PRONUNCIATION	FLUENCY	GRAMMAR	VOCABULARY	COMPREHENSION	READ	OPINION	REASON FOR OPINION
8	C+	B-	C+	B -	B+		1	To begin, monotonous. I like the conversations that build on the lab work.
9	B-	C+	C-	C-	C		1	I didn't like the symbols;they inhibit me now. Not enough time on conventional spelling. Your own control of the tape helps you learn to speak.
10	B	B-	C	C+	B+		1	I had high school French; we hear only the correct French, say only the correct form; the tape gives you personal attention but it's up to you.
11	C	D	D-	D	F		1	If in the summer, working continuously. It doesn't work when competing with other subjects.
12	B	B+	B-	B	B+		1	If you have the 12 hours a week. I've enjoyed it; it's a challenge, brings results in speaking.
13	B	B+	B+	B	A-		1	If you have 12 hours a week. Too much time on pronunciation, but any language is difficult. A challenge; I'd like to major in languages.
14	B	B-	B-	B	A-		1	The standard course is slower, but this takes time. Not sure about using symbols; I'm mixed up on account of them.

STUDENT NUMBER	PRONUNCIATION	FLUENCY	GRAMMAR	VOCABULARY	COMPREHENSION	OPINION	REASON FOR OPINION
15	B+	A-	B+	B	A-	1	If the course can be improved, fewer lab hours, more class, where you can talk to each other, learn, compare. In a week I'll forget all my French.
16	D+	D	D-	C-	D+	2	For others, perhaps, but not for me; don't have the time. Not enough explanation; a class would help.
17	D+	D	F	D+	C	1	Take repetition, so many hours makes you learn it; you go at your own rate; psychologically this is good. Lots of hours are needed.
18	C+	B-	C	B+	B+	2	If you have plenty of time. It goes up and down, easy, hard. If you can stay with it, OK.
19	B	B	B	B+	A	1	If you're interested, have the time. You put a lot in, get a lot out. It makes a good foundation.
20	B-	C+	C+	B-	B	1	You get good pronunciation, learn a lot, not by memorizing but by doing it, get used to rapid French.
21	C-	C-	D	C+	C-	1	If he wants to learn the language and use it. You have to want to do it to put in 12 hours.

STUDENT NUMBER	PRONUNCIATION	FLUENCY	GRAMMAR	VOCABULARY	COMPREHENSION	OPINION	REASON FOR OPINION
22	B-	B	B	B+	B	1	If you have time. You learn it better. We got to reading and writing too late
23	D+	D	F	C	F	1	To use in the country, if you can stay with it, it's good.
						4	To know the grammar and read French.
24	C-	C-	D	D	D-	1	If you are mature enough to overcome boredom, and stick to it.

APPENDIX D

Correlation between student aptitudes, the results, their previous French, and the time element.

EXPLANATIONS:

PENS Z -- Pensacola Z Scale
APT -- aptitude (Modern Language Aptitude Test)
The ENGLISH COOP consists of Speed of Comprehension, Vocabulary, and Total scores.
The ACT consists of Verbal and Composite scores.
The MLA TEST consists of Total Score, Speaking, Listening, Reading, and Writing scores.
The CO-OP 1956 is a listening comprehension test.
PREV FR -- previous French: HSF -- the student had French in high school; no F -- the student had no previous French.
* SCAT
** SAT

D-2	PENS Z	APT MLAT	ENGLISH COOP %			ACT %		MLA TEST %					CO-OP 1956 L		PREV FR	
			Speed Comp	Voc	Tot	Verb	Composite	Tot Score	S	L	R	W	#	%		
1	27	99	83	84	84	95	69	162	99	80	63	40	17	19	no F	
2	30	95				49	62	175	99	92	50	50	27	83	HSF	
3	20	90	83	99	96			149	99	84	58	10	21	53	no F	
4		90	50	37		83	84*	115	97	56	12	10	17	19	no F	
5	44	85	94	98	98	684**		181	97	80	63	81	23	66	no F	
6	25	85						107	94	27	38	2	21	53	no F	
7	29	75				96	97								HSF	dropped
8	32	75	53	23		66	74*								HSF	not finished
9	27	70	82	74		66	80*	142	98	60	15	33	17	19	no F	
10		70	52	73	64	92	62								no F	dropped
11		65	41	46	48	418**									HSF	dropped
12	39	60	24	17		37	68*								no F	dropped
13	33	60	77	78	78	25	82	161	98	77	58	46	24	71	HSF	
14	37	60	22	61	33	41	15	119	92	27	20	33	18	25	HSF	finished late
15	40	60	36	15	21	17	19	148	94	60	50	46	18	25	no F	
16	25	55	55	77		83	87*	159	89	80	63	50	27	83	no F	finished late
17	32	50	36	30	33	72	80									dropped
18	34	50													no F	dropped
19	30	50	52	46	48	78	92	79	84	16	12	0	13	5	no F	
20	29	45	80	91		94	94	93	87	15	19	17	14	7	no F	finished late
21	30	35	27	89		89	62*								no F	dropped
22	34	35	83	52	72	58	87	140	89	71	32	46	16	14	HSF	
23	46	35	42	54		78	80*	100	87	45	12	4	16	14	no F	
24	27	30							76						no F	not finished
25	43	25	83	78	84	41	62	122	99	71	20	2	21	53	HSF	
26	34	20						181	97	80	63	81	20	40	HSF	
27	36	15	2	10		16	28*	119	98	69	15	4	15	11	HSF	
28	23	10	35	54		75	89*								no F	dropped
29	43	10	41	19	33			94	76	42	15	2	21	53	no F	finished late
30	32	5	59	70		78	74*								no F	not finished
31	26							142	73	71	63	46	19	32	HSF	finished late
32			83	73	78	73	82	158	84	84	63	50	23	66	HSF	
33	30					80	82									dropped
34								209	99	71	92	92	26	79	HSF	
35								217	99	84	99	92	33	93.5	HSF	

		APT MLAT	ENGLISH COOP %			ACT %		MLA TEST %					CO-OP 1956 L		PREV FR	
			Speed Comp	Voc	Tot	Verb	Comp- osite	Tot Score	S	L	R	W	#	%		
SUMMER SESSION	1	95													no F	not finished
	2	90				19	22								2 yrs HS	dropped
	3	60	53	83		86	84*	171	84	69	81	81	20	40	no F	
	4	60				510**		139	99	56	32	33	17	19	1 sem AU - F	
	5	50	10	37		71	84								no F	not finished
	6	45													AU - F	not finished
	7	45													no F	dropped
	8	45													no F	not finished
	9	40						149	92	37	15	81	13	5	1 yr HS	
	10	40	6	34		37	28*								as a child	dropped
	11	40	95	87		91	87									dropped
	12	35	52	53	56	66	69	182	99	71	50	81	22	56	2 yrs HS	
	13	35	31	54		71	55*									dropped
	14	35	83	30	56	12	37									dropped
	15	20													2 sem F	not finished
	16	15				408**		170	94	60	78	67	13	5	4 yrs HS	
	17	10						138	73	37	63	50	13	5	2 yrs HS	

D-4	Total Score	MLA TEST % S	L	R	W	ENGLISH COOP % Speed Comp	Voc	Tot	ACT % Verb	Comp	CO-OP 1956 L #	%
1	207	99	92	86	93	31	54		43	55*	24	68.5
2	205	89	99.8	78	99.2	83	61	72	522**		23	63
3	198	97	98	81	81						29	87
4	198	89	84	92	96						23	63
5	187	92	92	92	73						21	50
6	187	98	84	86	67	77	99	96	593**		26	77
7	186	94	96	86	67						28	83
8	185	92	94	86	73						25	75
9	183	89	87	92	73						24	68.5
10	180	97	60	92	73						24	68.5
11	178	64	77	68	96						27	81
12	174	76	77	86	81						22	56.5
13	170	87	80	78	67						20	40
14	170	76	80	81	73				541**		19	32
15	167	76	77	58	81	83	38	56	25	62	20	40
16	160	84	69	68	67	93	50		89	88	27	81
17	158	84	77	97	40				95	86	18	25
18	157	76	80	92	40						27	81
19	157	57	60	92	67	41	46	48	55	44	20	40
20	153	73	60	78	58						26	77
21	152	76	77	86	40	75	99		78	89*	16	14
22	152	92	60	58	50	48	30	33	40	52	20	40
23	146	57	69	58	67						16	14
24	141	89	71	63	33	62	61	56	380**		24	67
25	140	53	77	68	46						20	40
26	133	17	45	63	67						18	25
27	126	47	60	92	18						15	11
28	121	76	60	15	40	91	92	92	79	91	13	5
29	121	57	77	78	25						16	14
30	120	64	45	38	33						19	32
31	117	64	56	32	33				40	44	19	32
32	113	35	45	68	18	75	74		83	89*	16	14
33	112	57	56	12	40						22	56.5
34	110	84	37	50	4	27	23		71	80*	21	50
35	103	57	27	38	18						16	14
36	86	53	23	38	2						15	11

Correlation between MLAT, English COOP, and the results in listening and reading French

	MLAT	ENGLISH COOP		RESULTS		PREVIOUS FRENCH
		Speed Comp	Voc	Listening	Reading	
1	99	83	84	80	63	no French
2	90	83	99	84	58	no French
3	90	50	37	56	12	no French
4	85	94	98	80	63	no French
5	70	82	74	60	15	no French
6	60	77	78	77	58	HSF
7	60	22	61	27	20	HSF
8	60	36	15	60	50	no French
9	55	55	77	80	63	no French
10	50	52	46	16	12	no French
11	45	80	91	15	19	no French
12	35	83	52	71	32	HSF
13	25	83	78	71	20	HSF
14	15	2	10	69	15	HSF
15	10	41	19	42	15	no French

Students who dropped from control section

	ENGLISH COOP %			ACT %	
	Speed Comp	Voc	Tot	Verb	Comp
1	18	41		28	28
2	84	66		71	44
3					
4					
5				97	48*
6					
7	69	78	72	91	85
8	75	77		83	80*
9	91	19	56	55	44
10	11	96	72		
11	62	52	56	22	24
12	91	61	78	73	87
13				7	26
14	69	68	72	24	26
15	21	23		54	48*
16	94	46	78	66	76
17	42	45		62	70
18	7	52	21	2	6
19	64	58		66	87*
20				66	74*
21	69	78	72	40	60
22	84	89		94	92*
23				24	52
24				66	55

APPENDIX E

PENSACOLA Z SCALE

NAME____________________

In this test you will find pairs of statements having to do with personal characteristics. One member of the pair is labeled A and the other B. You are to select from each pair the statement that BEST describes you. Then indicate the statement you have chosen by putting a check mark ( ) in the A or B column at the right margin of the page.

Consider the example shown below:

1. A) You are attractive.
   B) You are strong.

If you think You are strong describes you better than You are attractive you would put a check in the B column, in this manner:

1. A) You are attractive.
   B) You are strong.

A	B
	✓

If you marked B in your answer column, it would not necessarily mean that you are extremely strong or that you are not attractive. It would mean that on the whole, You are strong describes you better than You are attractive.

Be sure that you select one statement from every pair. You are not permitted to omit any pair of statements. Start with number 1 and continue through 66. You should finish the test in approximately 15 minutes.

1. A) You are too friendly for your own good.
   B) Your opinions are often incorrect.

2. A) Taking advantage of a person sexually makes you feel bad.
   B) You have no scruples in sex.

3. A) You are anxious.
   B) You are conceited.

4. A) To you life is a jungle.
   B) To you life is a bowl of cherries.

5. A) You day-dream politically.
   B) You don't formulate opinions about issues over which you have no control

	A	B
1		
2		
3		
4		
5		

6. A) In political activities you confine your efforts to group action.
B) In political activities you frequently indulge in individual endeavor.

7. A) You like a tightly organized group.
B) You like a loosely organized group.

8. A) You haven't made any mistakes in your life.
B) You can't get the mistakes you have made out of your mind.

9. A) There are some people you could never feel for.
B) Sometimes you feel a real compassion for everyone.

10. A) You like instructions to be specific.
B) You like instructions to be general.

11. A) You are sexually appealing.
B) You are faithful.

12. A) You are responsible for most of your troubles.
B) You sometimes get confused without any reason.

13. A) You frequently laugh at yourself.
B) You don't like your favorite habits ridiculed.

14. A) You frequently get away with murder.
B) People often blame you for things you didn't do.

15. A) You are not attracted to prudish people.
B) You are not attracted to unkempt people.

16. A) You want badly to "belong."
B) You don't care whether you "belong" or not.

17. A) You like a clean, neat house.
B) You like good food.

18. A) You can never forget that love is more than just sex.
B) You can take pleasure in sex as sex.

	A	B
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		

19. A) You are always on the lookout for new ways of attacking a problem.
B) In general, you find the tried-and-true methods work best.

20. A) You are rebellious.
B) You like discipline.

21. A) You don't like to gamble on getting a good break.
B) You usually figure on getting a good break.

22. A) You get more credit than you deserve.
B) You get less credit than you deserve.

23. A) You get into scrapes you didn't start.
B) When you get into trouble it is almost always your fault.

24. A) Most everybody lets you know directly what they think of you.
B) Some people are secretly trying to get the better of you.

25. A) You positively like to be different from your immediate associates.
B) Being different from your immediate associates makes you uncomfortable.

26. A) People are either your friends or your enemies.
B) People are rarely either real friends or real enemies.

27. A) Your hardest battles are with other people rather than with yourself.
B) You are cocky.

28. A) You could like anyone if you tried.
B) There are some people you know you could never like.

29. A) You are forgetful.
B) You have a meticulous memory.

30. A) There are some people you would like to tell off.
B) You are occasionally taken in.

E-3

	A	B
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

31. A) People criticize you unjustly.
B) People give you more breaks than you deserve.

32. A) You are charming.
B) You are firm and resolute.

33. A) Disappointments affect you so little that you seldom think about them twice.
B) Your daydreams are often about things that can never come true.

34. A) You would like to counsel a friend on his personal problem.
B) You would like to give first aid to a friend.

35. A) You collect things.
B) You lose things.

36. A) You like haphazard living.
B) You like routine.

37. A) Stuffed-shirts amuse you.
B) Stuffed-shirts get under your skin.

38. A) You keep calm in an emergency.
B) You can obey orders.

39. A) You are difficult to please.
B) You like to do favors.

40. A) You are aware of dripping water in the kitchen.
B) You are not observant.

41. A) You don't mind a coward.
B) You can't stand a coward.

42. A) You just can't stay mad even when you think you should.
B) There are some people you would like to take apart.

43. A) You admire spontaneity in people.
B) You admire efficiency in people.

	A	B
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		

44. A) You don't particularly like to march.
B) You like to march with a group you feel proud to belong to. 44

45. A) You need someone in whom you can confide completely. 45
B) You are selfish.

46. A) You play fair. 46
B) You are an individualist.

47. A) There are some magazines to which you particularly turn for the substantiation of your political ideas. 47
B) Your political ideas tend to be peculiar to yourself.

48. A) You can't help feeling antagonistic to people who hold important opinions radically different from yours. 48
B) You like a lot of people who disagree with you violently on important issues.

49. A) Your interest in general principles occasionally gets you up in the clouds. 49
B) You are a stickler for precision.

50. A) You have felt so sorry for someone you have cried. 50
B) You have gotten so mad you cried.

51. A) Yours is a quick and ready sympathy. 51
B) You are stern.

52. A) You are independent. 52
B) You are loyal.

53. A) You are talkative.
B) Often you're sure you've forgotten something important. 53

54. A) You would be happier if you felt more secure.
B) You would be happier if you were less gullible. 54

55. A) You never change your basic beliefs. 55
B) All your beliefs are open to debate .

56. A) You follow your conscience.
B) You have ethical standards which you follow. 56

57. A) You are very proud of your membership in some groups. 57
B) You don't go for groups.

58. A) You are indifferent to most people. 58
B) You like or you dislike people.

59. A) You don't worry about physical disorders. 59
B) Sometimes you figure you're a sure thing for ulcers.

60. A) You are dogmatic. 60
B) You are sloppy.

61. A) There are some people you admire so much you would not question their opinion. 61
B) You don't admire anybody very much.

62. A) Concerning your past actions you figure, "If I did it, it can't be too bad." 62
B) If you had your life to live over, there would be a lot of things you'd do differently.

63. A) You admire careful, rigorous thinking. 63
B) You admire brilliant, penetrating thinking.

64. A) The details of life are important to you. 64
B) You are often thoughtless.

65. A) You are well coordinated. 65
B) You seek new opinions.

66. A) You are self-confident.
B) You are a good Joe. 66

APPENDIX F

SCHEDULE -- Summer Session

June 8-12	Program Part I. frames 0-506. A daily assignment of 55 frames.
June 15-19	Introduction to reading (will take two days) Vocabulary study: frames 525-671 A daily assignment of 50 frames.
June 22-26	The structures of French and the dialogues. frames 701-850. A daily assignment of 30 frames.
June 29- July 2	The structures of French and the dialogues. frames 851-1000. A daily assignment of 30 frames. (note: July 3, a holiday, only four days to the week)
July 6-10	The structure of French and the dialogues. frames 1001-1160. A daily assignment of 32 frames. Reading Assignment: Tartarin de Tarascon.
July 13-17	The structures of French and the dialogues. frames 1161-1320. A daily assignment of 32 frames. Reading Assignment: Lafayette.
July 20-24	The structures of French, dialogues and conversations. frames 1321-1362, Conversations 1 through 22. A daily assignment of 40 frames. Reading Assignment: Lafayette.
July 27-31	Le Petit Prince -- Reading exercise.

FINAL EXAMINATION will be administered on July 31. It is a Three Hour examination.

Anyone who finishes the course sooner will be permitted to take the final examination as soon as the work is completed.

APPENDIX G

Programmed Learning.

List of frames in Part I used during the summer session:

0, 1, 3, 2, 6, 7, 8, 9, 10, 11,
12, 13, 14, 23, 24, 40, 41, 42, 46, 47,
49, 50, 51, 58, 62, 65, 66, 69, 70, 71,
78, 79, 83, 84, 88, 89, 96, 98, 99, 100,
101, 102, 103, 105, 106, 110, 111, 115, 116, 117,
118, 120, 122, 125, 126, 130, 131, 132, 133, 134,
135, 136, 137, 138, 139, 140, 141, 146, 147, 151,
152, 156, 157, 158, 159, 160, 161, 164, 170,
174, 175, 176, 177, 178, 179, 180, 181, 182, 187,
192, 193, 195, 196, 197, 205, 206, 207, 208, 209,
210, 211, 212, 219, 220, 221, 221a, 224, 225, 226,
226, 235, 236, 237, 238, 239, 240, 241, 242, 243,
244, 248, 250, 251, 253, 255, 263, 264, 273, 275,
276, 277, 279, 280, 282, 287, 291, 292, 293, 294,
295, 296, 297, 298, 299, 301, 302, 310, 312, 313,
314, 316, 318, 323, 327, 328, 329, 330, 331, 332,
334, 335, 336, 337, 338, 341, 342, 347, 348, 356,
357, 371, 372, 373, 374, 394, 395, 396, 397, 403,
408, 409, 411, 413, 418, 419, 422, 423, 432,
433, 434, 435, 446, 447, 452, 453, 455, 456, 461,
462, 473, 477, 478 through 506 (the end).

APPENDIX H

Programmed Learning

CORRELATION BETWEEN THE PROGRAM AND THE *STRUCTURE OF FRENCH* (grammar)

Problem 1: Imperative (verbs of 1st group). See SF - Structure of French, section 18.1.4 p. 139.
Problem 2: Present tense, verbs of 1st group. See SF 18.1.1 and and 18.1.2. p.134, 138.
Problem 3: Feminine - masculine contrast, section 7.0.1 p.85.
Problem 4: Interrogative *who*: SF: 26.1.1 p.252.
Problem 5: Feminine - masculine contrast in the adjective SF: 9.1.1. and 9.1.2 p. 101-102.
Problem 6: Verb *être* in present tense: SF p. 192.
Problem 7: Verb *avoir* in present tense: SF p. 191
Problem 8: Interrogatives: SF 26.1.1 p. 252.
Problem 9: Liaison forms of the determiners SF 7.6.2 p. 93-94.
Problem 10: Imperative verbs of 2nd class SF: 18.1.1 p. 139.
Problem 11: Present tense verbs of 2nd class SF: 18.1.1 p. 135, 136, 137, 138.
Problem 12: Prepositional phrase with *à*: SF: 16.3, p. 131
interrogative pattern SF 26.1.2 p. 252.
Problem 13: Conjugation of *aller*, present tense: SF page 191
verb *venir* SF p. 190.
Problem 14: Interrogatives p. 252.
Problem 15: Prepositional phrase with *de*: SF 16.4 p. 131-132.
Problem 16: The infinitives SF 18.18.1 p. 173-174.
Problem 17: Conjugation of *pouvoir*, *vouloir*, *faire*; SF p. 190, 191, 192,
Problem 18: Interrogatives: SF 252.
Problem 19: Conjugation; verbs with vowel change SF 18.23.2.2 p. 187, 188.
Verb *dire*: SF p. 191
Problem 20: Conjugation, verbs *devoir*, *boire*, *recevoir*, SF p. 189, 190,
Verb *prendre*: SF p. 190.
Problem 21: Negative pattern: SF 18.1.5 p. 140.
for part 2 see SF 25.1.3. p. 248.
Problem 22: Passé composé, verbs of 1st group: SF 18.8.1 p. 153.
Past participles: SF: 18.6. p.149.
Problem 23: Passé composé, verbs of the 2nd group: 18.8.1, p. 153.
For past participles: 18.6 p. 149.
Problem 24: Passé composé with *être*: 18.8.2 p. 154-155.
Problem 25: Adverbs of time - interrogative *quand*: 26.1.1 p. 251,252.
Problem 26: Irregular past participles: 18.6.2 p. 151-152.
Problem 27: French articles 7.6.1 p. 92-93.
In negative statement: 7.3.3 p. 88-89.

Problem 28: Numbers: 7.8: p.98.
Problem 29: Demonstrative determiners: 7.4.1, and 7.4.2: p. 89
for part II: 11.3 p. 112.
Problem 30: Possessive determiners: 7.5.1, 7.5.2 p. 90-91.
Problem 31: Pronoun *y*: 15.9 p. 130.
Problem 32: Pronoun *en*: 15.2.2 p. 121.
Problem 33: Pronouns *le*, *la*, *les*; 15.2.1, page 119, 120.
Problem 34: Contrast between *en* and *le*, *la*, *les*: Consult manual.
Problem 35: Indefinite words: *plusieurs*: 7.7.1 p. 94., *beaucoup*:
7.7.3 p. 96.
Problem 36: *En* (continued): p. 121, n. 5.
Problem 37: Review of *au*, *à la*: 16.3 p. 131.
Problem 38: *lui*, *leur*: 15.4.1. p. 123-124.
Problem 39: See manual.
Problem 40: *Me*, *te*, *nous*, *vous*: 15.2.3 p.122.
Problem 41: Reflexive verb pattern: 18.1.3 page 138-139.
In passé composé 18.8.3 p. 155-156.
Problem 42: The adjective: 9.1, 9.2, 9.3: pages: 101-105.
comparative: 9.4.1 p.105.
superlative: 9.5: p. 106.
lequel etc.: 26.2.4: p. 255.
Problem 43: Future: 18.3: p. 142-145.
Problem 44: Imperative: 24: p. 246-247.
Problem 45: Pronouns after prep.: 15.6.1: p. 126.
c'est...15.7.1 p. 128.
Problem 46: Adverbs: 21.1: p.223.
Problem 47: Negative words, the structure of French, section 25.4
p. 240-250.
Problem 48: Relative pronouns: *qui*, *que* and *où*: SF, 13.1 p. 114-115.
Problem 49: Double pronouns: SF, 15.5.1 and 15.5.2 p. 125.
Problem 50: Double pronouns: SF 15.5.3 p. 125-126.
Problem 51: The imperfect: SF, 18.2 p. 140-142.
Problem 52: Interrogatives with inverted word order: SF, 26.3.1
and 26.3.2 p. 257.
Problem 53: *Que* clause in the indicative: SF, 19.5.2 p. 211.
Problem 54: *Que* clauses in the subjunctive: SF, 19.5.4.1 p.212,
for the subjunctive see SF, 18.14 p. 166-170.
Problem 55: Infinitive patterns: SF 18.18.2 and 18.18.3 p. 175-176.
Problem 56: The conditional: SF 18.12 p. 161-164.
Problem 57: *En* and the present participle: SF, 18.5 p. 148.
Problem 58: *Tout*: SF, 7.7.5 p. 96-97.
Numbers: SF, p. 98-99.
Problem 59: Expressions of time: see manual.

BIBLIOGRAPHY

Carroll, John B. and Sapon, Stanley M. *Modern Language Aptitude Test*, 1959, The Psychological Corporation, New York, New York.

Jones, M. B. "The Pensacola Z Survey," *Psychological Monographs*, n. 452, 1957.

Le Français Fondamental (Premier Degré), Publication de l'Institut Pédagogigue National, Paris 1954.

Mueller, Theodore and Leutenegger, Ralph. "Some Inferences about an Intensified Oral Approach to the Teaching of French Based on a Study of Course Drop-outs." *Modern Language Journal* Vol. XLVIII N. 2, February 1964, pp. 91-94.

Mueller, Theodore and Mayer, E. *Structure of French*. Wayne State University, Audio-Visual Utilization Center, Detroit, Michigan, 1962.

Pimsleur, P., Mace, L., and Keislar, E. *Effect of Preliminary Training in Pronunciation Discrimination Upon Learning of French Pronunciation*. 1961 USOE.

Sawyer, Jesse; Ervin, Susan; Silver, Shirley; D'Andrea, Joanne; Aoki, Harno. *The Utility of Translation and Written Symbols During the First Thirty Hours of Language Study*. University of California, Berkeley, 1962.

Smith and Jones. "Astronauts, Antarctic Scientists and Personal Autonomy," *Aerospace Medicine*, Vol. 33, February 1962, pp. 162-166.

Valdman, Albert. "Not All is Wrong with French Spelling," *French Review*, December 1963, pp. 213-223.

Wershow, I. R. *An Evaluation of Programmed Learning in the French Institute of the Summer of 1963*, USOE.